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Uncovering the Myth of a Jobs/Nature Trade-Off

Alex Geisinger



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UNCOVERING THE MYTH OF A JOBS/NATURE TRADE-OFF

Alex Geisinger[†]

CONTENTS

INTRODUCTION	115
I. THE CULTURAL BASIS OF THE JOBS VERSUS ENVIRONMENT TRADE-OFF: UNCOVERING THE MYTH	118
A. <i>The Judeo-Christian Tradition: The Basis for Separation and Domination</i>	119
B. <i>The Modern Era</i>	122
1. <i>Science and the Idea of the Expansion of Human Empire into Nature</i>	123
2. <i>Changing the Meaning of Work and Nature</i>	126
a. <i>Capitalism and the Reformation: Placing Labor into the Man/Nature Dichotomy and Valuing Only Labor that Transforms Nature</i>	127
b. <i>Romanticism and Transcendentalism: Entrenching the Trade-Off</i>	134
CONCLUSION	137

INTRODUCTION

In his March 25, 1999 testimony to the U.S. Senate regarding the potential impacts of the Kyoto Protocol,¹ the President of the United Mine

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1. The Kyoto Protocol, negotiated in December, 1997, would require the United States to reduce emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC's), perfluorocarbons(PFC'S), and sulfur hexafluoride (SF₆) 7% below 1990 levels by 2008-2012. *Economic Impacts of the Kyoto Protocol: Hearing Before the Senate Comm. on Energy and Natural Resources*, 106th Cong. 66-67 (1999) (statement of Cecil E. Roberts, President, United Mine Workers of America). Over the next 12 years, the Protocol requires Organization for Economic Cooperation and Development countries to reduce emissions 20-40% below what they would be if current trends went unchecked.

Workers of America estimated that enacting the greenhouse gas emissions reductions envisioned by the protocol would result in a loss of over 1 million American jobs.² Environmentalists of course dispute these job loss claims as unfounded³ or at least extremely exaggerated.⁴ In November of 1997, at the height of public debate regarding the Kyoto summit, the New York Times conducted a poll of the American public's desire for environmental protection. They found that 61% of their respondents favored action to protect the environment from global warming even if such protection would result in a loss of jobs.⁵ In July of 1998, the Charleston Daily Mail carried an article criticizing Governor Underwood's efforts to weaken proposed clean air rules based in part on the fallacy that air protection would cost jobs.⁶ In June of that same year, the Washington Post reported that Virginia lagged behind its neighboring states in prosecution of environmental claims due in part to a belief that punishing polluters, instead of working with them, would result in the loss of jobs.⁷ Whether it is international regimes, the passage of domestic laws, or even the enforcement of environmental laws, the idea of a trade-off between jobs and environmental protection permeates virtually all environmental policy decisions.⁸

Fiddling While the Planet Smoulders: Western Governments have to Cut the Rhetoric Before Anything can be Done About Carbon Dioxide Levels, THE GUARDIAN, Nov. 1, 1999, available in 1999 WL 25742393.

2. *Economic Impacts of the Kyoto Protocol: Hearing Before the Senate Comm. on Energy and Natural Resources*, 106th Cong. 69 (1999) (statement of Cecil E. Roberts, President, United Mine Workers of America).

3. See generally Sharon Beder, *Corporate Hijacking of the Greenhouse Debate*, THE ECOLOGIST, Mar. 1, 1999, available in 1999 WL 14160751.

4. See Robert Mayer, *Global Warming Debated at University of Texas Conference*, DAILY TEXAN, Mar. 8, 2000, available in 2000 WL 15361887.

5. John H. Cushman, Jr., *Public Backs Tough Steps for a Treaty on Warming*, N.Y. TIMES, November 28, 1997, at A36.

6. James Kotcon, *Benefits of Clean Air Outweigh Costs: Underwood is Wrong to Oppose the New EPA Rules*, CHARLESTON DAILY MAIL, July 15, 1998, at 4A, available at 1998 WL 5962947.

7. Brooke A. Masters, *Neighbors Differ in Pollution Inquiries: Virginia Lags Behind Maryland in Prosecution Referrals*, WASHINGTON POST, June 16, 1998, at B1.

8. The environment versus job dichotomy is frequently the source of heated confrontation in the environmental arena. See, e.g., Tom Uhlenbrock, *Which Forest Do You Prefer?*, ST. LOUIS POST-DISPATCH, May 31, 1998, at B1, available at 1998 WL 3337138 ("in discussing [environmental issues], the loud, sometimes angry debate . . . [frequently takes on similar character]: jobs vs. the environment, property rights vs. government intervention."); Jim Newton et al., *Battle Over LAX Expansion Leaves Behind Turbulence Growth: Some are Asking Whether the Airport Can Handle the Load, or Should it Share the Business with Other Areas?*, LOS ANGELES TIMES, May 29, at A1, available at 1998 WL 2432011 (describing how the debate of LAX expansion sounds in concerns over jobs and environment); David Broder, *Balancing Jobs and the Environment*, DENVER POST, July 19,

Although the idea remains central to public environmental decision-making,⁹ for years a majority of economists have agreed that environmental protection does not result in a loss of jobs.¹⁰ This article analyzes the way the idea of a job versus environment trade-off may have come into being. It argues that the idea of a jobs versus environment trade-off is deeply rooted in a number of historical forces that have shaped our understanding of work and nature. In particular, it argues that the idea of a zero sum trade-off between work and nature is rooted in the institutions of modern scientific capitalism and the environmental ideology of Henry David Thoreau's Transcendentalism. As a result of the way these forces influence our understanding of work and nature, the article argues that individuals in modern society intuitively conceive of work and nature in a state of absolute tension. If, as this article argues, the idea of a jobs versus environment trade-off has no empirical basis and is truly a myth, such an understanding would dramatically affect the current public policy dynamic; creating common ground for environmentalists and labor—two groups usually found on opposite sides of current national environmental policy issues. Such an understanding will also substantially impact law creation by de-emphasizing one of the most powerful anti-environment rhetorical devices that currently influences law creation.¹¹

1998, at J04, available at 1998 WL 61166879 (describing the western governors' attempt to deal with the dynamic where groups start diametrically opposed to one another on issues of environment and jobs and only compromise after expenditure of much time and resources).

9. For consideration of the issue in the legal context, see David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost Benefit Analysis*, 24 *ECOLOGY L.Q.* 545, 573-74 (1997) and Lois J. Schiffer & Jeremy D. Heep, *Forests, Wetlands and the Superfund: Three Examples of Environmental Protection Promoting Jobs*, 22 *J. CORP. L.* 571 (1997).

10. In perhaps the most comprehensive study of labor statistics and economic models ever conducted on the issue, Professor E.B. Goodstein concludes:

In general, one should be wary of any statement preceded by '[a]ll economists agree' But, in this case, there seems to be universal accord that, on an economy-wide basis, the 'jobs versus environment' debate is based purely on myth. A similar point is made, for example, in both a recent paper financed by the American Petroleum Institute and in the leading environmental economics textbook. The tremendous increase in [environmental protection] spending over the last 20 years has . . . not led to any net job loss in the economy.

E.B. GOODSTEIN, *JOBS AND THE ENVIRONMENT: THE MYTH OF A NATIONAL TRADE-OFF* 11-12 (1994) (footnote omitted); see also KENNETH J. ARROW ET AL., *BENEFIT COST ANALYSIS IN ENVIRONMENTAL, HEALTH, AND SAFETY REGULATION: A STATEMENT OF PRINCIPLES* (1996) (stating that regulations will affect the distribution of jobs but not the general employment level).

11. For a general analysis of how rhetoric shapes law, see Holly Doremus, *The Rhetoric and Reality of Nature Protection: Toward a New Discourse*, 57 *WASH. & LEE L. REV.* 11 (2000) ("The way words are put together to form stories and discourses shapes the law and society . . . 'Discourses,' loose collections of concepts and ideas, provide a shared

The article is organized in the following way. The first section examines some of the basic cultural forces that have come to frame our understanding of man and nature. The next section then analyzes the way in which particular forces of the modern era co-opted this basic understanding to create the idea of a zero sum trade-off. The final section concludes with some thoughts on what uncovering the myth may mean for environmental protection.

I. THE CULTURAL BASIS OF THE JOBS VERSUS ENVIRONMENT TRADE-OFF: UNCOVERING THE MYTH

The idea of a trade-off between jobs and the environment is the result of the way that a number of historical factors have shaped Western conceptions¹² of work and nature.¹³ This section will analyze these historical factors. While modern society's conception of the environment is extremely complex and results from a variety of sources, it is possible to disentangle some of the more important sources of our understanding of environment from this mix.¹⁴ For example, this article considers how Judeo Christian and early philosophical thought condition our understanding of our relation to nature. It will also consider such factors as the rise of science and industry, changing economic relations, and other factors in the modern era that further impacted this understanding. It is my goal to describe how these factors together have come to shape our ideas of nature and work in such a way that, although empirical evidence suggests

language for envisioning problems and solutions."); JOHN S. DRYZEK, *THE POLITICS OF THE EARTH: ENVIRONMENTAL DISCOURSES* 3 (1997).

12. One immediate caveat on the scope of this work can be inferred from this statement; the article considers only Western conceptions of man's relationship to nature.

13. There is no single word that captures the breadth of the concept we are treating here. Many writers use the word "nature," while others use the word "wilderness," while still others use the word "environment." I will tend to use all three of these. Arguably, each of these words has different meanings. For purposes of this article, the different use is not intended to impart different meanings except where explicitly noted.

14. A number of texts have taken as their task a relatively comprehensive treatment of the concept of environment in society. See 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* (1994); CAROLYN MERCHANT, *THE DEATH OF NATURE: WOMEN, ECOLOGY AND THE SCIENTIFIC REVOLUTION* (1980); RODERICK NASH, *WILDERNESS AND THE AMERICAN MIND* (rev. ed. 1973); MAX OELSCHLAEGER, *THE IDEA OF WILDERNESS: FROM PREHISTORY TO THE AGE OF ECOLOGY* (1991); JOHN PASSMORE, *MAN'S RESPONSIBILITY FOR NATURE: ECOLOGICAL PROBLEMS AND WESTERN TRADITIONS* (1974). A number of new treatises also take as their focus the rise of the science of ecology and its impact on our understanding of our relationship to environment. See, e.g., DONALD WORSTER, *NATURE'S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS* (2d ed. 1994).

otherwise, we cannot conceive of environment and jobs as anything but opposed to each other, in a type of zero-sum trade-off.

A very brief outline of the analysis will be helpful. The analysis will start by describing the way in which influential early sources, particularly the Judeo-Christian tradition and early philosophy, created a duality, separating man from nature and making man superior to nature. The next part will consider how this conception was co-opted by science, which cloaked the idea of separation in a utopian vision, ultimately providing a means by which human society could be considered in a type of zero-sum tension with nature. The article will then turn to ideas of work and nature. First it will focus on how work became deeply inter-connected with the utopian vision of separation and came to be understood as a means to transform nature into goods for human use, thus setting work into tension with nature. Finally, the section will analyze how American wilderness philosophy, in particular the American Transcendentalist movement, came to equate nature with concepts of purity, resulting in an understanding of nature as a place where work cannot happen.

A. The Judeo-Christian Tradition: Basis for Separation & Domination

Perhaps the strongest cultural influence on modern man's understanding of nature are the conceptions of nature contained within the Judeo-Christian tradition. These are significant not only for their relative explicitness of treatment of the subject but also due to the significant role religious doctrine played in western civilization up to and into the modern period. The Judeo-Christian tradition describes man as separate from, and dominant of, nature. This description is based in part on 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 moved upon the face of the waters."¹⁵ On the third day, the waters were confined and land and vegetation were created.¹⁶ On the fifth day, He created the creatures of the sea and the birds.¹⁷ On the sixth day, God created animals and, finally, man.¹⁸ In the Judeo-Christian tradition, nature

15. *Genesis* 1:1-2 (King James) (emphasis added).

16. *See id.* 1:9-13.

17. *See id.* 1:20-23.

18. *See id.* 1:24-31.

is the result of an orderly, hierarchical succession, where man is created separate from the land, seas, flora and fauna.¹⁹

Not only was the creation of nature orderly, but man, as the last of God's creation, was given dominion over it.

And God said, Let us make man in our image, after our like- ness; 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, 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.²⁰

The creation myth thus conceives of humankind as separate from the animal and plant kingdoms both through its separate creation at the end of an orderly progression and also due to the fact that humankind is created in God's image.²¹ Moreover, these separate beings are given total domination over the natural world.²² While some would argue that this treatment of man and nature is the primary basis for our current mistreatment of the

19. *See id.* 1:1-31.

20. *Id.* 1:26-30 (emphasis added).

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

22. 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* 2:4-23. Adam is created to tend to the Garden as a caretaker. *See id.* 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 (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 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 control nature for his survival.

environment,²³ at the least the Judeo-Christian tradition creates a foundation for the idea that humans and nature are separate with humans in a position of superiority.

A similar view of nature can also be found in much of the early western philosophy that continues to underlie a substantial amount of modern thought.²⁴ The Greek understanding of man and nature also substantiates the man-nature dichotomy and dominion themes. The images of environment as resulting from "intelligent, planned and well thought-out-acts of a creator" are strong in Greek thought.²⁵ Greek thought also suggests that man has been given a dominant and special place in this well-planned world.²⁶ Indeed, one myth told by the Sophist Protagoras to his

23. See Lynn White Jr., *supra* note 21. White's well-known article is perhaps the most negative treatment of the Judeo-Christian tradition's impact on our current understanding of environment. White argues that man's separation and domination of nature, along with the destruction of pagan ideas of animism, opened the door to the exploitation of nature. Ultimately, White warns, the radical split between man and nature must be healed before real environmental protection can be realized. *Id.* For a broader analysis of White's thesis, see LEISS, *supra* note 14.

White's wholesale condemnation of the Judeo-Christian tradition ignores a number of competing ideologies found within the same religious texts including the idea of stewardship. This is because nature is God's creation and is put in man's control, man must treat nature wisely and carefully. This conception of man's relationship to environment is also likely influenced by the myth of the fall from the Garden of Eden and its emphasis on man as caretaker of nature and not dominator of nature. For a more detailed discussion of the concept of stewardship, see FRANCIS A. SCHAEFFER, *POLLUTION AND THE DEATH OF MAN: THE CHRISTIAN VIEW OF ECOLOGY* (1973).

24. It is, of course, folly to try to establish the actual original source of any of these particular ideas. As noted by Glacken, even many of the ideas associated with the Greek and Judeo-Christian tradition have various complex antecedents. For example,

[t]he 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. Notwithstanding the inability to define the first source of this ideology, there is no doubt that a particularly strong sense of separation and dominion is contained in both the philosophical and religious traditions underlying the development of western culture.

25. GLACKEN, *supra* note 14, at 39. 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 (Loeb Classical Library ed., William Heinemann Ltd. 1945).

26. Xenophon, for example, in remarking on a conversation of Socrates', notes that it

audience 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 Epimetheous and Prometheus to distribute to them their proper qualities. Such qualities were distributed by Epimetheous 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 Epimetheous 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 animals.²⁷

While many other competing myths exist, foundational secular thought presents a vision of an environment strikingly similar to the Judeo-Christian tradition: that nature is the subject of an orderly and divine creation, and that nature is separate from and dominated by man.²⁸

B. *The Modern Era*

Religious and early philosophical thought had created a division between man and nature with man in a position of dominance. This basic ideology was to become radically co-opted during the early modern era. Sources of that time begin to separate the world of man completely from the world of nature and to place this division into a utopian context that pitted human society against the natural world.

was Socrates' belief that nature is ordered for the benefit of man. Socrates observed that there is a light for everyday tasks but dark which is needed for rest. The seasons and earth are created so as to provide man with a continuous supply of food. Fire is created as a defense against cold and dark. Animals, too, are produced for the sake of man, who gains more advantages from the animals than from the fruits of the earth. XENOPHON, *MEMORABILLA AND OECONOMICUS* 297-307 (O.J. Todd trans., Harvard Univ. Press 1923). Aristotle, in *Politics*, expresses 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., Modern Library ed. 1943).

27. GLACKEN, *supra* note 14, at 41.

28. See *Genesis* 1:1-27.

1. *Science and the Idea of the Expansion of Human Empire into Nature*

One major characteristic of the modern era is the embrace of science and the scientific method.²⁹ The rise of science as a cultural force marked a revolution in humankind's understanding of environment.³⁰ It served to deepen the rift between man and nature and gave rise to an idea of progress as an unequivocal good that, in turn, became a validating basis for the expansion of human empire into nature.

Both the image of the scientist, as well as the "language" of science deeply impacted the way in which humankind related to the natural environment.³¹ The scientist became an observer of the natural world and devalued subjective experience in comparison to quantification.³² The scientist understood the physical world not as a set of sensations resulting from human cognition, but rather as objectively existing data.³³ 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.³⁴ Manipulation

29. It is hard to pinpoint the time of the beginning of the modern era and to identify the innumerable factors that characterize it. Clearly, it has roots in Enlightenment thought, particularly with 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. No matter what its source, the strength of the modern paradigm cannot be ignored. As noted by Oelschlaeger:

The Enlightenment (c. 1700-1800), initiated and sustained by a remarkable succession of scientific and philosophic thinkers, combined a number of diverse intellectual elements and historical moments into a powerful, virtually overwhelming cultural paradigm – one centered around the Industrial Revolution. This paradigm, termed Modernism, still rules the world. More than one historian has argued that only the Neolithic revolution has had as profound an influence on human existence as the Industrial Revolution.

OELSCHLAEGER, *supra* note 14, at 91 (internal citations omitted).

30. 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).

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

32. WORSTER, *supra* note 31, at 210-19.

33. *Id.*

34. OELSCHLAEGER, *supra* note 14, 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

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.³⁵ Instead, scientific man became an observer and manipulator of nature, which had become an object of scientific manipulation.

Not only was nature objectified by science but it also lost its significance as the physical space in which man lived. It became an abstract concept, no longer "sensed" but neither measurable nor understandable without physical experience. It is perhaps this factor that has made the most significant impact on modern society's understanding of nature as separate from human civilization. Such a transition allowed mankind to think of its civilization as existing separately from nature instead of as existing within nature. This distinction is captured by the idea of the frontier, which serves simply as the dividing line between "civilization" and environment.³⁶

The power of science to fundamentally alter the physical environment,

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 . . . characteristics capable of mensuration and quantification, and thus arithmetical manipulation, are primary and thus real qualities; felt qualitative experience are secondary and subjective.

Id.

35. 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.

36. The absurdity of the idea is examined by JAMES TREFIL, *A SCIENTIST IN THE CITY* (1994). The purpose of the book Trefil explains, is to consider the city as a part of nature. He notes:

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 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 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 law 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.

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 unqualified 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.³⁷

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."³⁸ "Civilized humans-in-the-modern-age would employ the power of science to remake the wilderness, the world with which humans-in-the-archaic-age had empathetically identified themselves."³⁹ 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."⁴⁰

To achieve these goals, the scientists of Bacon's Bensalem⁴¹ 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.'"⁴² Bacon's scientists used caves "for all coagulations, indurations, refrigerations, and conservations of bodies . . . and the producing also of new artificial metals . . ."⁴³ They, by their art, turned fresh water into salt water and used the energy of wind and water.⁴⁴ They built great houses where they "imitated and demonstrate[d] meteors, as snow, hail, rain . . . and . . . thunders[.]"⁴⁵

37. 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].

38. OELSCHLAEGER, *supra* note 14, at 81-82.

39. *Id.*

40. MERCHANT, *supra* note 14, at 169.

41. See NEW ATLANTIS, *supra* note 37, at 458.

42. WORSTER, *supra* note 14, at 30.

43. NEW ATLANTIS, *supra* note 37, at 480-81 (citations omitted).

44. See *id.* at 481-82.

45. See *id.* at 482.

In their gardens they "[practice] likewise all conclusions of grafting and inoculating And [they] make (by art) in the same orchards and gardens trees and flowers to come earlier or later than their seasons, and to come up and bear more speedily than by their natural course they do."⁴⁶ The scientist of Bacon's New Atlantis no longer assisted nature, but manipulated it and made nature better than it could make itself.⁴⁷ Such a vision abandoned the prevailing ideology of the time, completely rejecting both the "prehistoric ideal of life in harmony with nature [and] classical ideal of nature as a bountiful world" sustaining humankind.⁴⁸ Up to the modern era, people had conceived of themselves as dependent on nature.⁴⁹ Now the influence of science led people to conceive of nature as an object to be overcome in the "enlargement of the bounds of Human Empire."⁵⁰ 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.⁵¹ While Bacon was later to qualify his argument that scientific inquiry alone could lead to a new Utopia,⁵² the idea of human society being bettered through the unimpeded application of science to nature was to become a dominant theme of modernism.⁵³

2. *Changing the Meaning of Work and Nature*

The simple split between man and nature itself provides a solid foundation for the work versus environment dichotomy. Simply, to the extent that work takes place in one side of the sphere – the side of human

46. *See id.* at 482-83 (citations omitted).

47. *See id.* at 483.

48. *See* OELSCHLAAGER, *supra* note 14, at 81.

49. 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. 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.

50. WORSTER, *supra* note 14, at 30.

51. 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 conceived of his science as a way of returning to the prelapsarian state).

52. 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 EISELEY, *THE MAN WHO SAW THROUGH TIME* 63 (1961).

53. 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." LEISS, *supra* note 14, at 71.

culture – it stands opposed to environment.⁵⁴ Such an argument, by itself, however, is less than convincing. The idea of separation, however, does set the backdrop against which ideas of work and nature in the modern era⁵⁵ can be examined. It is only upon more detailed analysis of how work and nature came to be characterized within this context that the tension between the two becomes distinct. The next parts of this section will describe the way in which the ideas of work and nature were affected by the forces of modernism, resulting in the two being pitted against each other in a type of zero-sum trade-off. The first part will examine the way in which work came to be perceived as the driving force of the expansion of human empire into nature, while at the same time being specifically defined as human activity that transforms nature. The following part will describe the way in which nature came to be specifically associated with the absence of human work.

a. *Capitalism and the Reformation: Placing Labor into the Man/Nature Dichotomy and Valuing Only Labor that Transforms Nature*

Through his work, Francis Bacon served to place the idea of separation of human society from nature into a utopian context that had at its core a belief that human well being would be enhanced through a progressive application of science to nature. This idea was itself co-opted by the theory of capitalism, which replaced the idea of scientific exploration of nature with an idea of progress based on the exploitation of nature through labor.

Before analyzing how economics accomplished the transformation, it will be useful to take a short diversion and to examine how labor used to be conceived before the modern era and how certain religious forces facilitated the economic transformation of the idea of work. In his now famous analysis of the changes in religious ideology that facilitated the rise of capitalism, *The Protestant Ethic and the Spirit of Capitalism*,⁵⁶ Max

54. There are, of course, many types of work that are regularly identified with the environment. In particular, farming has always been seen as a bridge between human culture and the environment. However, as we will later see, the use of technology has had a substantial impact on the farmer's relation to the land. See *infra* notes 84-85 and accompanying text.

55. While we may again be on the verge of a cultural revolution, the cultural factors of the modern era still maintain their priority in the shaping of current understandings of environment and human culture. For an analysis of how concepts of work and nature may be affected by post-modern culture, see JAMES ROBERTSON, *FUTURE WORK: SELF-EMPLOYMENT AND LEISURE AFTER THE INDUSTRIAL AGE* (1985); OELSCHLAGER, *supra* note 14.

56. MAX WEBER, *THE PROTESTANT ETHIC AND THE SPIRIT OF CAPITALISM* (Talcott

Weber describes the dynamic that changed the way work came to be perceived in modern society. Weber's analysis is, at this point in time, well-known to most and thus will not be repeated in detail. Weber begins his analysis by identifying an important change in religious attitudes toward work that began with the Reformation.⁵⁷ Before the Reformation, he notes, religion was indifferent to the idea of work.⁵⁸ "Since everyone was simply waiting for the coming of the Lord, there was nothing to do but remain in the station and in the worldly occupation in which the call of the Lord had found him, and labour as before."⁵⁹ Even at the onset of the Reformation, this basic understanding remained intact. Weber describes Luther's ideas regarding work in this manner.

One may attain salvation in any walk of life; on the short pilgrimage of life there is no use in laying weight on the form of occupation. The pursuit of material gain beyond personal needs must thus appear as a symptom of [a] lack of grace, and since it can apparently only be attained at the expense of others, directly reprehensible.⁶⁰

Thus, prior to and at the beginning of the Reformation, religious doctrine considered work as a means to satisfy one's basic needs but nothing more.

The changing idea of work is left to Luther's spiritual successors. In particular, Weber points to the ideology of Calvinism as the basis for this change.⁶¹ The most significant characteristic of Calvinism for purposes of Weber's analysis is the idea of predetermination.⁶² Weber argued that the idea of predetermination led Calvinists to have to prove their predetermined status in answering the question "[a]m I one of the elect?"⁶³ To Calvinists, the proof of one's elect status was accomplished through worldly activity.⁶⁴ Weber explains this change in ideology in part through an analogy to Lutheranism.

Parsons (regular text) trans., Scribner 1958).

57. *Id.* at 80.

58. *Id.* at 84.

59. *Id.*

60. *Id.* at 84 (footnote omitted).

61. In identifying the religious foundations of this new ideology, Weber also considers Pietism, Methodism and the Baptist Sects. *See id.* at 128-154.

62. *Id.* at 98.

63. *Id.* at 110.

64. *Id.* at 115. Interestingly, as Weber notes, Calvin himself did not believe that one's elect status could be accomplished through worldly activity. *Id.* at 110. He instead answered the question by stating that one "should be content with the knowledge that God has chosen and depend further only on that implicit trust in Christ . . ." *Id.* This answer, however, was impossible for his followers to accept and thus a competing idea emerged. *Id.*

The religious believer can make himself sure of his state of grace either in that he feels himself to be the vessel of the Holy Spirit or the tool of divine will. In the former case his religious life tends to mysticism and emotionalism, in the latter to ascetic action; Luther stood close to the former type, Calvinism belonged definitely to the latter [S]ince Calvin viewed all pure feelings and emotions, no matter how exalted they might seem to be, with suspicion, faith had to be proved by its objective results in order to provide a firm foundation for the *certitudo salutis*.⁶⁵

Worldly work became the means by which individuals proved themselves one of God's chosen.⁶⁶ Moreover, not all work was treated equally by the new religious ethic. Work was a means to glorify God and thus only work that was Godly – that is work that helped one's fellow man – was the means to prove one's predetermined status.⁶⁷ Thus, through the influence of Calvinism, the idea of work began to be transformed from a means to satisfy one's basic needs to a way to prove one's self-worth through socially beneficial activity.⁶⁸

As ideas of labor started to change in the modern era, economic influences played a significant role in giving these ideas their new shape. In *The Wealth of Nations*,⁶⁹ a cornerstone of capitalist theory, Adam Smith conceived of the economic theory that captured the new economic relations of the time. Smith's early capitalist theory influenced the modern idea of

65. *Id.* at 113-14 (footnote omitted).

66. *Id.* at 115.

67. As Weber notes:

The world exists to serve the glorification of God and for that purpose alone. The elected Christian is in the world only to increase this glory of God by fulfilling His commandments, in accordance with that purpose. The social activity of the Christian in the world is solely activity *in majorem gloriam Dei*. This character is hence shared by labour in a calling, which serves the mundane life of the community For the wonderfully purposeful organization and arrangement of this cosmos is, according both to the revelation of the Bible and to natural intuition, evidently designed by God to serve the utility of the human race. This makes labour in the service of impersonal social usefulness appear to promote the glory of God

Id. at 108-09 (footnote omitted).

68. Of course, this tells only part of Weber's story. He continues by noting that the Calvinist call to action led to the accumulation of wealth as a direct result of one's labor. As long as this wealth was not used for impious reasons, its accumulation was not just condoned but even approved of as a sign of one's hard work. *Id.* at 162-63. Weber notes that, even by the time of Benjamin Franklin, the religious purpose behind accumulation of wealth had already been lost and thus; the accumulation of money took its place as a determinant of one's social worth. *Id.* at 180.

69. ADAM SMITH, *THE WEALTH OF NATIONS* (Edwin Cannan, ed., Modern Library 1994).

work by tying it to the expansion of human empire into nature originally espoused by Bacon and more specifically, by specifically defining labor as the process of transforming nature into commodities for human consumption.

Behind the new idea of work stood the labor theory of value. The labor theory of value was originally derived by John Locke from Aquinas' theory of the just price.⁷⁰ According to Locke:

It is labour indeed that puts the difference of value on everything If we will rightly estimate things as they come to our use and cast up the several expenses about them – what in them is purely owing to Nature and what to labour – we shall find that in most of them ninety-nine hundredths are wholly to be put on the account of labour.⁷¹

Thus, “it is work that creates value by harnessing the resources of nature to human use.”⁷²

Adam Smith reflects this understanding in *The Wealth of Nations*:

Every man is rich or poor according to the degree in which he can afford to enjoy the necessities, conveniences, and amusements of human life. But after the division of labour has once thoroughly taken place, it is but a very small part of these with which a man's own labour can supply him. The far greater part of them he must derive from the labour of other people . . . which he can command, or which he can afford to purchase. The value of any commodity, therefore, 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.⁷³

Marx too ascribed to a similar view on labor and value. He, for example, “regarded uncultivated land . . . as ‘not being of value’ because no human labor has been incorporated in it.”⁷⁴

Implicit in the labor theory of value are a number of ideas that we continue to equate with modern conceptions of labor and that put labor into direct opposition with nature. First, the labor theory of value assumes that nature, if untouched by human labor, is valueless. That is, if work creates

70. ROBERTSON, *supra* note 55, at 91.

71. *Id.* at 92 (quoting JOHN LOCKE, SECOND TREATISE OF GOVERNMENT (1690)).

72. ROBERTSON, *supra* note 55, at 91-92.

73. SMITH, *supra* note 69 at 33 (footnote omitted).

74. ROBERTSON, *supra* note 55, at 94. Note that while Smith used the theory as a core element of his theory of capitalism, Marx used the theory to explain the nature of exploitation in a capitalist society. *Id.*

and is the only measure of value, then nature without work is valueless. This idea is supported by Smith's own definition of value. According to Smith, "[t]he word value . . . 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.'"⁷⁵ The idea of nature as having its own intrinsic value thus died with the onset of capitalism.⁷⁶ Only instrumental worth—value based on how an object served human need—was valid.⁷⁷

The purpose of work, it also follows, is to create value; it is to transform nature into objects that benefit humans either through use or trade.⁷⁸ The labor theory of value thus puts work and nature into direct opposition.⁷⁹ Productive work is connected with the process of transforming nature for human benefit, while nature is defined solely as a resource for the accomplishment of this goal.⁸⁰ Based on this understanding, protection of nature through regulation is perceived as restrictive to the process of productive labor.

The idea of nature being dominated by work for the betterment of human society is, of course, reflective of the general utopian vision of the expansion of human empire first elaborated by Bacon in his advocacy of science. Capitalism supported this idea. Indeed, Smith argued in *The Wealth of Nations* that human welfare is greatest not in the wealthiest of countries but in the fastest growing ones:

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

75. SMITH *supra* note 69, at 31.

76. It might be argued that untransformed nature has a value to human beings as a place of escape or leisure. This idea, however, did not arise until after the onset of the modern era as humans became more insulated from the risks of nature and with the rise of European Romanticism and American Transcendentalism. The influence of these schools of thought on ideas of nature and leisure will be discussed *infra* at Section I.B.2.b.

77. WORSTER, *supra* note 31, at 215-16.

78. Indeed, early capitalism stated that only material goods were of value. For example, when John Stuart Mill argued that the work involved in the training of workers might be regarded as productive, he added the qualification "provided than an increase of material products is its ultimate consequence." ROBERTSON, *supra* note 55, at 95 (footnote omitted). It was not until the rise of neoclassical capitalist theory, which based the determination of value on what a market actor was willing to pay that the idea of the provision of services was valued separately. While this continues to be the case today, it does not detract from the basic idea that work within nature is valued only to the extent that it transforms nature into material objects for human benefit.

79. ROBERTSON, *supra* note 55, at 95-96.

80. *Id.*

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.⁸¹

Thus, together with the influence of science, economics advocated an ideology where human happiness was directly related to progress. Unlimited growth – both material and demographic – was the ethical justification for Capitalism 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."⁸² Smith's idea of progress did not advocate mastering nature through the application of science but instead on the ability of human labor to transform the world of nature to human use. The growth of human empire – the extension of human civilization into the world of nature – was thus now fueled by, scientific inquiry and by labor. In this way, work again was placed into tension with nature. As the engine of human civilization's expansion, work was the means by which human culture benefited through the domination of nature. Protecting nature was thus perceived as a limit on the ability to better the human condition through a progressive application of labor to nature.⁸³

81. SMITH, *supra* note 69, at 79.

82. Max Oelschlaeger, *supra* note 14 at 92.

83. As work had become more intertwined with an individual's sense of self-worth, which in turn was identified with the transformation of nature, protection of nature was perceived of as well as an attack on the worker him or herself. Simply put, although the religious impetus to do work to prove one's chosen status has faded, to have a job is still a basis for proving that one is a valued member of society. Indeed, the economic rationale for the connection between work and social value was a key to Adam Smith's capitalism. In one of his book's most well-known passages, he addresses this issue:

As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it . . . he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

SMITH, *supra* note 69, at 484-85. Protection of nature, of course, is perceived as a

While the idea of work became connected with the continuous transformation of nature for the benefit of man, traditional work within nature, such as farming, logging and mining, did continue.⁸⁴ The rise of the industrial age, however, changed the way traditional work within nature was perceived.

Examples of human knowledge gained through labor are readily apparent if we look. For millennia humans have known animals largely through work. Work gave the people who trained and worked with animals a particular knowledge of them. 'There is something about a horse that isn't an engine you know,' Albert Drinkwater, a British Columbia horse logger, explained; 'a horse won't work for everybody the same. He'll work for one man and he'll pretend to pull for the other one.' 'The horses themselves became . . . part of the man that drove them.'⁸⁵

The idea of work as a means to know nature, however, came to be severed by the increased use of machines in these endeavors. The use of machines decreased both the knowledge and bodily skills necessary to working in nature.

Old loggers in Coos Bay, Oregon, for example, denigrate modern logging. Their own work among the big trees demanded judgment, strength, and hours of strenuous labor on a single tree, all of which might be lost if the tree fell wrong and broke. But modern loggers harvest 'pecker poles.' The old loggers knew big timber, but loggers are cutting 'dog hair these days.'⁸⁶

In essence modern workers were, in the eyes of their predecessors, removed from their connection to nature by intervening machinery. Modern workers no longer needed to understand and respect nature to succeed at their profession. Thus, not only did a new idea of work arise in the modern era, but even when men did work within nature, the idea of man being connected to nature through work was changed through the intervention of machinery. As a result, one could not come to know nature

restriction on work and thus is not only an attack on work in general but also an attack on an individual's ability to be a productive member of society.

84. Richard White, *Are You an Environmentalist or Do You Work for a Living?*, in *UNCOMMON GROUND: TOWARD REINVENTING NATURE* 171, 177 (William Cronon, ed. 1995).

85. *Id.* (quoting Richard Rajala, *The Forest as Factory: Technological Change and Worker Control in the West Coast Logging Industry, 1880-1930*, 32 *LABOUR/LE TRAVAIL*, 84 (Fall 1993)).

86. *Id.* at 180 (quoting WILLIAM G. ROBBINS, *HARD TIMES IN PARADISE: COOS BAY, OREGON, 1850-1986* 122 (1988)).

through work. Indeed experiencing nature instead became associated with leisure activities.

b. Romanticism and Transcendentalism: Entrenching the Trade-Off

As a new concept of human civilization emerged, organized on the ideology of science and economics, 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.⁸⁷ Romanticism and American Transcendentalism⁸⁸ 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,⁸⁹ such an idea continues to

87. See, e.g., HENRY DAVID THOREAU, *WALDEN* (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.

Id. at 161. 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 (Houghton Mifflin 1906).

88. “‘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 has given him the ability to transcend the material world by using 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.

89. See generally ROBERT C. PAEHLKE, *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

play a less significant role in modern Western society than the idea of nature arising from scientific capitalism. Indeed, much of the Romantic and Transcendentalist philosophies actually exacerbated the already developed ideological separation of work 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:

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.⁹⁰

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.”⁹¹ Thus, in a short time, the idea of wilderness was greatly transformed in American thought. “[B]y the mid-eighteenth century wilderness was associated with the beauty and godliness that previously had defined it by

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 worth while, 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* 255-57 (1912).

90. RODERICK NASH, *WILDERNESS AND THE AMERICAN MIND* 45 (3rd ed. 1967).

91. *Id.* at 45; see also EDMUND BURKE, *A 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* (John T. Goldthwait trans., University of California Press 1960) (1763) (considering the treatment of the sublime at this time).

their absence. Men found it increasingly possible to praise, even to worship, what they had formerly detested."⁹² The 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 attempted to reinstalled nature with an intrinsic moral value, while at the same time advocating nature's aesthetic value to man.⁹³ Thus, 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 work 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."⁹⁴ Wilderness, specifically because it was untouched by the correcting hand of human culture, most clearly showed the perfection of God's work.⁹⁵ Thus, of all the characteristics of natural areas, purity

92. NASH, *supra* note 79, at 46.

93. *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,
They yet sublimely rise, and on their heights
Your soles 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).

94. NASH, *supra* note 79, at 46.

95. Thoreau reflects this understanding in one of his most famous passages recounting his climb of Mount Katahdin.

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 Night. Here was no man's garden, but the unhand-selled 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 forever 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 . . .

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 activity does not exist. Similarly, the way to experience nature became entwined with ideas of leisure. Nature became a place of quiet reflection, experienced best by not disturbing it. The work-nature trade-off was thus complete. Not only is work identified with the process of transforming nature, but nature becomes a place absent the work of human beings and associated with concepts of leisure. Wilderness philosophy—which was, in many ways, a response to the objectification of nature—thus served to fully entrench the idea of a job versus environment trade-off, which continues to affect human understanding today.

CONCLUSION

The idea that protecting nature will result in a loss of jobs is nothing more than a myth. Indeed, while environmental protection does impact the type of jobs created by society, it has been argued that protecting the environment may actually lead to a small net increase in job creation and also a likely increase in blue-collar employment. These arguments make sense when one considers that environmental protection efforts require experts, engineers, and frequently the creation of a substantial amount of environmental protection equipment. This image of the relationship between work and environment, however, has labored for years behind a myth that conceives of these two things as in tension with one another. The purpose of this article has been to uncover and examine the historical sources of this idea of work and nature. Breaking down this barrier to understanding will inform policy makers, provide fuel to decrease the political misuse and propagation of the myth, and ultimately realign the political dynamic that currently pits labor and environmentalists against one another when it comes to protecting the environment.

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