

reach out

remove the earplugs of rationality.

we can't eat or breathe reason.

and if
could you hear GO_(o)D her whisper?
exists,

this is not the best we can do...

open
heart.

open
mind.
open
eye.

feeling

remember

CARTESIAN ECO-FEMDARKANISM: SHE COMES FROM THE EARTH, THEREFORE WE ARE

BY
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This is a piece to draw people together. It suggests cooperation, listening, learning, etc. There will be lines that you may not agree with. There will be leaps of logic. We'll even experiment with a little anti-logic. This piece is not the sum of its parts, and I consider it a small part of a large discussion, not a prescription.

Briefly, we can and should (and perhaps, must) think about the environment. Think about ways to reduce pollution, to save forests, to save species. An equal (and I believe concurrent) task must be to identify more broadly with the natural world, indeed to remember we are nature. We need to think about thinking. Somehow we must wrestle with the limits of rational thought, based—as it is—in a powerful, but painfully limited perception. We need to ask bold questions, such as “Can we build a computer or a skyscraper or a car without the use of deadly poisons?” The asking is clearly the hard part, because the answer is easy: yes, we can. We can understand our limits while pursuing our highest potential.

Humility will not keep us from our greatest achievements.

And we can love nature. I do. I am passionate about rivers and trees and rocks and cold nights and fire. I feel a very strong connection with them. Whether that relationship can be measured or not, it is very real and very powerful. This work is my attempt to demonstrate that connection in writing.

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* Text and Photographs (unless otherwise credited) © Troy L. Payne, 2007. Notes and Comments Editor, *Environmental Law*, 2006–2007; Member *Environmental Law*, 2005–2006; J.D. expected 2007, Lewis & Clark Law School; B.A. 2000, Southwest Missouri State U. (History). Thanks first and foremost to Professor Janet Neuman for her guidance, friendship, and admirable dedication to freedom of thought. Thanks to Professor Eric T. Freyfogle for his humility and strength of mind. Thanks to Matt Vega and Jamie Payne for very helpful editing and translation. I also owe a debt of gratitude to many people who took time to discuss this issue, shared thoughts or a book, and helped me refine my work: among them, thanks to Vincent Capone, Professor Steve Johansen, Jeffrey Johnson, Jamie Saul, Corey Tolliver, and Poncho Wallace. That the green circle might be seen.

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“There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other is that heat comes from the furnace.”¹

I. INTRODUCTION: MEET YOURSELF

The danger lies in the forgotten. Aldous Huxley, in his work *The Doors of Perception*, describes the brain as a reducing valve.² Its primary function is to maintain survival. To accomplish this, the brain acts as a filter, reducing the vastness of information it receives to the small trickle which best helps to provide for the body’s immediate needs.³ The bulk of what constitutes reality (infrared waves, sounds of ultra low or high pitch, smells of every variety, voices from the grave) is discarded as unnecessary or even counter-productive. Over time, our filter adjusts—as certain information gains importance in promoting survival, we grow more receptive; as some becomes less important, the valve tightens down.⁴

¹ ALDO LEOPOLD, A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE 6 (2d ed. 1949). Leopold has been described as “the spiritual father of conservation,” and is one of the most revered American conservationists next to John Muir. Eric T. Freyfogle, *The Land Ethic and Pilgrim Leopold*, 61 U. COLO. L. REV. 217, 217 (1990). Freyfogle remarks: “Leopold’s life story, in short, is a type of pilgrim’s progress, and we see in it and in the land ethic the path by which one man gained a goal that more and more of us seek daily: harmony with our physical world.” *Id.* at 220. After much consideration of Leopold’s work, I am sure that his idea of owning a farm has more to do with living on the land than actual *ownership* of the land.

² ALDOUS HUXLEY, *THE DOORS OF PERCEPTION AND HEAVEN AND HELL* 22–25 (2d ed. 1991) (referring to the work of philosopher Dr. C. D. Broad); *see also* WHAT THE BLEEP DO WE KNOW!? (Twentieth Century Fox & Captured Light Industries 2004) (discussing the process by which the brain reduces reality to a singular perspective).

³ HUXLEY, *supra* note 2, at 22–23. Consider how important sight is to forming our experience and reconsider that we only see a small percentage of a wide spectrum of visual information. How much more important an issue would global warming be if we could *see* it getting hotter with our infrared vision? “Wow! Does it seem a lot brighter and redder this summer?”

⁴ The use of “we” and “our” in this Comment usually means “people.” At some points in the Comment, “we” refers more generally to all things living, not just humans. Although I do not purport to speak for all people, I do wish to emphasize—despite the penchant for classification and boundaries—unity over disunity. I would rather err on the side of connection. Academia is full of word landmines loaded with assumptions. As Justice Frankfurter once put it, words carry old soil. J. Frankfurter, *Some Reflections on the Reading of Statutes*, 47 Colum. L. Rev. 527, 537 (1947). I will point out a few such terms, but ask that individual words not be interpreted

Not long ago, all humankind lived off the land. Our connection with the Earth was quite apparent—we pulled our sustenance from the ground, made our homes in forests and valleys, and responded of necessity to discrete shifts in natural patterns. To survive, we learned to listen to the language of nature, softer than a whisper. Nature communicates with us all. Some hear as they always have. Some hear on special occasions: a single sunset remembered of thousands gone by,⁵ the smell of one morning on the mountain. Others have certainly forgotten this unused language—wither the ability to see in the dark⁶ or hear the quiet step of a predator's approach. Thereby, we forget the importance, the fragility, and the *value*⁷ of our home.

Aldo Leopold's point becomes clear: as we live in a culture which increasingly separates us (both physically and spiritually) from nature, we

without reference to the surrounding thoughts. I am willing to defend my advocacy, but not an interpretation of a word which I do not intend. A limitation of language, I suppose.

⁵ See



A note on the use of photographs: critical environmental literature very often contains an implied or express criticism of the Enlightenment, suggesting that the resort to reason and rationality at the expense of intuition and myth is one root of our misguided relationship with nature. This argument will be explored in more detail, but it is important to note that in an effort to apply this criticism practically in this Comment, I will resort not only to the use of the logic of language, but will make an effort to persuade the reader by resort to emotion as well, employing pictures and poetry. Though these are not traditional sources of proof in academic papers, they serve the function of helping us broaden our definition of “proof,” so as not to marginalize feeling. The photos transcend the boxes and baggage of words—but they are no less language. I do not offer them (or any other source) to prove a point in some conclusive fashion: **this is a discussion.**

⁶ To test this, spend a night in the woods and leave all flashlights at home. Once dark arrives, walk around a bit. It does not take many nights to realize that you can see just fine.

⁷ Value is the first landmine. This is not to mean a human-assigned worth, but more an intrinsic goodness. For example, I love the picture of the Sun, *supra* note 5, for its pure symbolization of a moment in which I felt humbled, yet embraced, by existence. Someone might offer me five dollars for the paper on which the moment is printed (it may be worth that much or more as a reminder of a similar experience she had), but *I* define the meaning of the moment itself. It is more than a symbol—sunset. When I hear crickets, I feel a connection with eternity. That is the value of cricket chirps to me. Though the meaning of these experiences is individual, the feeling that there is meaning in such a relationship can be unifying.

risk the very understanding that underlies a powerful appreciation for and connection to the Earth. Might the instincts we depended on just a few short centuries ago fade away as we no longer use them? How might the loss of these instincts affect our lives?

Instead of viewing the Earth and all of nature as an interconnected and interdependent community, we increasingly view ourselves as separate from the natural world. We have made vast changes to the environment to support rapid development and to control nature's outputs without thought of the effects on the biotic community.⁸ Science breaks the world down into its smallest component parts. Economics places a dollar value (or no value) on each of those parts. The legal system defines which of the parts are worth protecting for our *use*. Our consciousness provides us with the power to learn about and manipulate natural processes. We take our limited understanding of the processes and try to impose order—managing component parts like employees in a factory—instead of facilitating the natural balance. What we lack in this interaction with the natural world is another powerful aspect of human consciousness: an intuitive sense of right and wrong which would guide our use of knowledge.

All is not lost. Remembrance of the forgotten requires very little honest effort: a morning in the forest by a fire, an afternoon on the river, a night under the stars. Leopold suggests working some earth for a garden or splitting a downed oak for winter heat to rekindle the connection.⁹ These simple interactions with the world help us to transcend the over-sized, isolating ego Descartes and Freud built for us and move beyond the singular vision of self, toward a realization that we are a part of something more. These interactions will carry a different meaning for each individual, but there is unity in finding meaning in our relationship with nature.

This piece is an effort to challenge readers to do just that: to step beyond the shackles of culture, law, science, and self to re-form a connection with nature, essential to health and life on this planet. I hope to connect in a more holistic way with the reader, to reach the part of her intuition that *knows* we need to relate to the world in a better way, rather than appeal to reason alone.

I envision a new (old) relationship with the environment—a relationship which will re-(un-)focus the environmental movement generally and environmental law specifically—a relationship that interweaves feeling, intuition, and experience into our legal and social mechanisms. To do this, I do not draw a straight line from question to conclusion. This piece wanders a winding path, first asking the reader to reconsider some of the basic cultural, economic, and legal assumptions underlying the modern conception of the environment, then to reconsider the definitions of proof and value as a means to recognize the interconnection of all life. Finally, I argue that to re-forge a meaningful connection with nature we must adopt a

⁸ Examples include: monoculture farming, the filling of and development over coastal wetlands, the devegetation of riparian ecosystems, vast and tragic clear-cut deforestation, and flaming rivers.

⁹ LEOPOLD, *supra* note 1, at 6.

much broader sense of humility: qualifying our individual perspective, appreciating the limits of reason, and respecting connection. Our vast knowledge has provided us with tremendous perspective, and I suggest we put it to use.

I come to this topic not as an authority, but—as Leopold approached his work—as a humble pilgrim endeavoring to add my own intuition, knowledge, experience, and sense of what is good to a discussion much larger than myself.¹⁰ For on the issues of what is beautiful and what is right, “the intuitive conclusion of the non-expert is perhaps as likely to be correct as that of the professional,”¹¹ and in that capacity, all humans are equal. “Our science, so called, is always more barren and mixed up with error than our sympathies are.”¹²

II. OUR malCONCEPTION OF NATURE: “[WE] MUST UNLEARN WHAT [WE] HAVE LEARNED”¹³

There is no adequate word for the life spirit. There is no equation or formula to represent it. And if there were, those symbols would only be as deep as the paper that holds the print. There are things that we know, sense, and feel which defy explanation by symbol—the root of human logic. If we elevate a purely scientific understanding of our relationship with the environment above all else, we exclude the unquantifiable specters of emotion and intuition, without which we can only have a controlling and ultimately destructive relationship with nature. Reason is based on separation and classification—a useful means of recording and understanding mechanical processes. Though an amazing faculty of the human intellect, reason alone cannot govern or repair our relations with each other or with the natural world.

In his study of the history of ecological understanding, Donald Worster demonstrates that behind the minds that have shaped our own ecological understanding lie cultural influences and individual experiences.¹⁴ Those

¹⁰ The discussion is also much bigger than this Comment. This is not an exhaustive survey of environmental ethics or of the intimate workings of environmental law, but is an attempt at synthesizing some large concepts (which need synthesis as much as narrow problems). I will consider the development of some of our ecological conceptions over the last several centuries—to expose the roots of how we think about nature—and ask whether we ought to reconsider our assumptions about the natural world.

¹¹ CURT MEINE, *ALDO LEOPOLD: HIS LIFE AND WORK* 361 (1988).

¹² DONALD WORSTER, *NATURE'S ECONOMY: A HISTORY OF ECOLOGICAL IDEALS* 91 (1994) (quoting Henry Thoreau's unpublished journals).

¹³ *STAR WARS: THE EMPIRE STRIKES BACK* (Twentieth Century Fox & Lucas Films 1980) (quoting Master Yoda's instruction to Luke Skywalker while training his connection with the force—forget limitations and stretch out your feelings).

¹⁴ See generally WORSTER, *supra* note 12, at 114–87 (describing, for example, Charles Darwin's early experience in the Galapagos as influential on his evolutionary theory). Darwin described his experiences on the islands as formative, witnessing the harshness and cruelty of nature and survival on these rocky, volcanic islands. *Id.* at 115–29. He saw a dark side in nature—conflict and deprivation. This had an impact on Darwin's characterization of nature in his theory of evolution as tragic, violent, and full of suffering. *Id.* His focus on these aspects of

influences, both subtle and strong, reflect the authors' views of humanity's relationship with nature, which often rest on assumptions about the natural world that have proven incomplete, inaccurate, and dangerous.¹⁵ To understand and form our own connection to the environment, we must review the assumptions on which we rely.

A. CULTURAL disCONNECTIONS: Religion, Science, and Philosophy Have Set Us Apart

Cultural ideas have a profound impact on the way we view our own relationship with nature. Over the past couple of millennia, teachings from religion, science, and philosophy have counseled a separation of human beings from the rest of the natural world by classifying and valuing human beings independent of and superior to nature.

The very way we think demonstrates this disconnection. Classification is a part of human cognition; we learn by classifying new information into existing categories: history, science, math, and so on. We remember and communicate by reference to stock understandings, squeezing what we see into the boxes of what we have seen before. We order our world by distinction: we isolate differences and similarities as a means of identification—a chair is different from a dog; capitalism is different from socialism.

Yet, in applying classification and difference to *relationships*—the immeasurable and unquantifiable connections between living things—our culture, our science, and our philosophy have done violence to life by threatening our connection with nature.¹⁶ For instance, consider the cultural separation of people into two classes—primitive or civilized—one of humanity's initial social classifications.¹⁷ Or maybe consider the traditional classification by judeo-religions of those who find spirituality in trees, rivers, or celestial bodies or who believe in magic and mysticism into one of their largest classes: the damned.¹⁸ These divisions take root from the idea that living off the Earth or relating to it spiritually demonstrates a pre-historical baseness.¹⁹ Modern classifications like “third-world” and “developing nation”

the natural world have had vast effect on the ways we view humanity and the environment—to him, *life* meant being stronger than his competitors. *Id.* at 172–87. Arne Naess, the founder of the Deep Ecology movement in the 1960s and 1970s, argues that the struggle to survive ought to be thought of as the struggle for coexistence, instead of for the “ability to kill, exploit, and suppress.” Arne Naess, *The Shallow and the Deep, Long-Range Ecology Movement: A Summary*, in *THE DEEP ECOLOGY MOVEMENT: AN INTRODUCTORY ANTHOLOGY* 1, 4–5 (Alan Drengson & Yuichi Inoue eds., 1995).

¹⁵ WORSTER, *supra* note 12, at 172–87.

¹⁶ A prime example of which is Social Darwinism—applying evolutionary biology to human social relations. See *infra* note 22.

¹⁷ MAX OELSCHLAEGER, *THE IDEA OF WILDERNESS: FROM PREHISTORY TO THE AGE OF ECOLOGY* 1 (1991).

¹⁸ Often the church sent alchemists, witches, pagans, animists, and other sordid characters to early graves, so it is not too difficult to understand cultural aversion to such ideas or practices when they once threatened survival.

¹⁹ But see OELSCHLAEGER, *supra* note 17, at 5–12 (describing emerging studies showing that

display this same condescension toward those who have not yet conquered nature and mechanized their society. Somehow, the human story now “lies in our triumph over a hostile nature.”²⁰ Christianity’s central theme is illustrative: the good shepherd protects his flock against the horrors of nature—wolves and lions that live in the untamed wild—and leads his followers to greener pastures out of this lowly world.²¹ Over time, separateness from wilderness became a mark of individual success and intelligence—the heart of autonomy—and a measure of cultural dominance.²² Humanity became the sole repository of the divine on Earth. At the heart of these cultural conceptions lies a fundamental distinction between the importance and meaningfulness of relationships between human beings and between humans and any other form of life.

This break from the wild represents “ten thousand years of cultural history separat[ing] us from intuitive awareness of the . . . natural, organic process including soil and sun that created *Homo Sapiens* and all other life-forms on earth.”²³ To replace this waning awareness, scientists embarked centuries ago on the mechanical study of nature, breaking it down into its component parts—ever smaller—classifying, separating, and focusing on difference. Continued study allowed humans to manipulate natural processes, harness energy, and develop technology. With a perceived cognitive superiority to nature and as the creators of energy-hungry machines, humans mechanized their conceptions of nature. Wendell Berry describes how such a view manifests itself in the realm of agriculture:

The damages of our present agriculture all come from the determination to use the life of the soil as if it were an extractable resource like coal, to use living things as if they were machines, to impose scientific (that is, laboratory) exactitude upon living complexities that are ultimately mysterious. If animals are regarded as machines, they are confined in pens remote from the source of their food, where their excrement becomes, instead of a fertilizer, first a “waste” and then a pollutant. . . .

If plants are regarded as machines, we wind up with huge monocultures,

many pre-industrial cultures, though characterized as brutish and ignorant, had intelligence equal to ours in understanding nature and had rich artistic and religious traditions). The notion that ancient or aboriginal peoples were unintelligent (or simple) is a judgment about what is and is not valued as knowledge—excluding many valuable forms of understanding. Our specialized system of education trains people to be experts at doing one particular thing, but many “can do virtually nothing for [themselves]. In living in the world by his own will and skill, the stupidest peasant or tribesman is more competent than the most intelligent worker or technician or intellectual in a society of specialists.” WENDELL BERRY, *THE UNSETTLING OF AMERICA: CULTURE AND AGRICULTURE* 21 (1977).

²⁰ OELSCHLAEGER, *supra* note 17, at 1.

²¹ WORSTER, *supra* note 12, at 26. The creation myth in which God ejects human from the garden paradise after our fall from grace also perpetuates the human-nature distinction.

²² See *id.* at 172–74 (describing how social Darwinism’s conception of nature as barbaric and savage affected both how we view civilization—as independent of and unaffected by nature—and how we see the growth of civilization as an evolutionary battle which requires the control and destruction of nature).

²³ OELSCHLAEGER, *supra* note 17, at 2.

productive of elaborate ecological mischiefs, which are in turn . . . much more susceptible to pests and diseases than mixed cultures and are therefore more dependent on chemicals.

If the soil is regarded as a machine, then its life, its involvement in living systems and cycles, must perforce be ignored . . . treated as a dead, inert chemical mass. If its life is ignored, then so must be the natural sources of its fertility The result is absurd

. . . .

. . . In modern agriculture, then, the machine metaphor is used to usurp and wipe from consideration not merely *some* values, but the very *issue* of value.²⁴

The scientific exactitude demanded in laboratory experiment sharply eliminated most of what lay beyond the five senses, limiting the world to “positive knowledge.”²⁵ In part a challenge to the dominance of the church, Enlightenment science sought to disprove the existence of god, luck, and ghosts. By separating humans from nature as a source of religious and emotional connection and concentrating value in human beings, the judeo-religions helped pave the way for Enlightenment science to study the earth as an object of analysis, devoid of any value.²⁶

To belong to the scientific profession means dedication to objectivity, the verifiable and quantifiable, and “the notion that knowledge requires the strict repression of the viewer’s subjective feelings about the object studied.”²⁷ This is how we are educated: separating and studying smaller and smaller niches of information—believing in little that we cannot symbolize with numbers or repeat in a controlled experiment. Specialization creates experts in small fields of knowledge, to which they apply rational mechanics objectively. We defer decision making to the experts²⁸ who have so over-focused on their narrow study that a feeling of right or wrong has little weight against numbers and tests which prove something “works.” Such a

²⁴ BERRY, *supra* note 19, at 90–91.

²⁵ WORSTER, *supra* note 12, at 90 (limiting that which we are capable of knowing to the scientifically provable).

²⁶ *Id.* at 28–29.

²⁷ *Id.* at 28–29, 130–31; see Hanspeter Padrut, *Heidegger and Ecology*, in HEIDEGGER AND THE EARTH: ESSAYS IN ENVIRONMENTAL PHILOSOPHY 11, 16–21 (Ladelle McWhorter ed., 1992) (describing how the reductionism inherent in objective analysis contributed to the view of human as master and creator of the natural world).

²⁸ BERRY, *supra* note 19, at 18–20. Environmental law, developing as it did during the rise of the administrative “branch” of government in the 1960s and 1970s, is rife with deference rules requiring courts to defer to administrative “experts” on a wide range of economic and environmental considerations. For an examination of the “presumption of expertise” and growing judicial deference to agency decisions under the National Environmental Policy Act, see generally Susannah T. French, *Judicial Review of the Administrative Record in NEPA Litigation*, 81 CAL. L. REV. 929 (1993). The Supreme Court has *never* ruled against the government or in favor of a plaintiff representing an environmental interest since the Act passed in 1969. See David C. Shilton, *Is the Supreme Court Hostile to NEPA? Some Possible Explanations for a 12-0 Record*, 20 ENVTL. L. 551, 553 (1990).

focus leaves out interconnection and subjugates intuition as if it is a contaminant in the experiment. It is not for the chemist who makes the pesticide to decide the ramifications of its application.²⁹ The chemical may kill things other than pests, may poison water supplies, and might disrupt natural cycles known and unknown, but the decision whether it is marketable or profitable, sensible or ethical is left to other experts whom we trust to make the right decisions. Right, generally, has had little to do with the health of the world and all its inhabitants and more to do with that which can be economically or scientifically proven in a courtroom.

"I think, therefore I am."—a defining moment in human philosophical history, yet trees don't think (any scientist will tell you), therefore, they aren't.³⁰ Through philosophical works by Descartes and many others, reason and rational capacity became the separating qualities of humans from the rest of the natural world—the enlightenment of human beings. The philosophers who led the Enlightenment posited that human progress was the highest social value and that scientific truth, rather than ecclesiastic truth, was supreme.³¹ Thus, truth imposed from outside the individual's own reasoning (by religion or prevailing morality) was wrong, and scientific study was right.³² Reason alone could unlock the secrets of the divine, and only humans had the key. Though many of these thinkers shared values such as liberty and equality, these notions had a wholly human center.³³ Most

²⁹ BERRY, *supra* note 19, at 19–20. Berry notes:

[T]he aim of specialization may seem desirable enough. The aim is to see that the responsibilities of government, law, medicine, engineering, agriculture, education, etc., are given into the hands of the most skilled, best prepared people. The difficulties do not appear until we look at specialization from the opposite standpoint—that of individual persons. We then begin to see the grotesquery—indeed, the impossibility—of an idea of community wholeness that divorces itself from any ideas of personal wholeness.

The first, and best known, hazard of the specialist system is that it produces . . . people who are elaborately and expensively trained *to do one thing*. We get into absurdity very quickly here. There are, for instance, educators who have nothing to teach, communicators who have nothing to say, medical doctors skilled at expensive cures for diseases that they have no skill, and no interest, in preventing. More common, and more damaging, are the inventors, manufacturers, and salesmen of devices who have no concern for the possible effects of those devices. **Specialization is thus seen to be a way of institutionalizing, justifying, and paying highly for a calamitous disintegration and scattering-out of the various functions of character: workmanship, care, conscience, responsibility.**

Id. at 19 (bold emphasis added). The thought that we can delegate responsibility and morality to certain specialized officials for every public policy issue requires a government of infinite size—what it really requires is that all people share responsibility and contribute to morality equally.

³⁰ Descartes, in his theory of automata, argued that thinking is a function of the human soul and that animals—because they lack the capacity for reason—were simply biological machines. Put simply, humans have a soul, animals do not, and trees were not worth comment. *See* Internet Encyclopedia of Philosophy, Rene Descartes (1596–1650), <http://www.iep.utm.edu/d/descarte.htm> (last visited Jan. 28, 2007).

³¹ Daniel M. Warner, *Time for a New Enlightenment*, 34 AM. BUS. L.J. 455, 473–75 (1997).

³² *Id.* at 473.

³³ *See generally* DAVID EHRENFELD, *THE ARROGANCE OF HUMANISM* (1978) (criticizing our philosophy and ethics as too human-centered and arguing for the value of all life).

thought these values most rationally pursued by a morally neutral market with few constraints on selfishness (take anything you want, so long as not to interfere directly with that which another owns).³⁴ Truths such as “all men are created equal” (the language of which necessarily excludes women and all other life) espoused by many of the thinkers of this era became relative as they were turned into rights for use by governments. The equality principle did not make it into the U.S. Constitution initially—the business of slavery made equality too costly a political endeavor. Rights—which sound like they ought to derive from Truths—were instead grounded in ownership of property. Property defined voting rights, was available only to a minority of the people, and was the principle check on autonomy and authority. Sure, we have changed the rights around a bit. Property—that is, land—perhaps no longer exclusively defines political rights in this country, but money—property in a tradable paper form—does.³⁵

On these (and many other) religious, scientific, and philosophic foundations, our culture bases its conception of humanity as separate from, independent of, and dominant over nature. In viewing the environment as something that *surrounds* us:

[W]e have already made a profound division between it and ourselves. We have given up the understanding—*dropped it out of our language and so out of our thought*—that we and our country create one another, depend on one another, are literally part of one another; that our land passes in and out of our bodies just as our bodies pass in and out of our land; that as we and our land are part of one another, so are all who are living as neighbors here; human and plant and animal . . . cannot possibly flourish alone . . . our culture and our place are images of each other and inseparable from each other, and so neither can be better than the other.³⁶

This divide leaves humanity in an exploitative relationship with the world which spills into our relationships with each other. For Berry, this exploitation was horrifically exemplified by former Secretary of Agriculture Earl Butz’s declaration that “food is a weapon” and a former Secretary of Defense justifying the use of nuclear weapons in terms of “palatable” levels

³⁴ *Id.* at 476–77.

³⁵ By a similar analogy, racism is not acceptable, but our Darwinian influence still grounds a rampant classism in the United States and elsewhere which has many of the same effects as racism. It is not in our training to see these connections. We learn in boxes—history, science, math, government. These boxes do not exist. These subjects are the artificial separation of “facts” reorganized into similar groups. However, each is informed of and influences the other. The circle that connects all ideas continues to grow for me. The temptation to think the opposite is very strong, particularly in the study of the law. I learn segments of the law—torts, contracts, property—which are actually closely connected. It takes a few years to begin to see the larger whole from which these pieces come. That process is considered to be the mastery of law, but the more important skill is the larger vision to see law’s interaction with and dependence on history, science, math, and government, and the recognition that much of the law (given a common law tradition, based on an adherence to precedent) is grounded in moral and cultural traditions and many value assumptions.

³⁶ BERRY, *supra* note 19, at 22 (emphasis added).

of destruction.³⁷ That these government leaders could unite food—and all its associations with peace, sharing, pleasure, kindness, and generosity—with war represents a crisis of culture, character, and community.³⁸ In such a world:

it is inevitable that food will be looked upon as a weapon, just as it is inevitable that the earth will be looked upon as fuel and people as numbers or machines . . . [t]o think of food as a weapon . . . may give an illusory security and wealth to a few, but it strikes directly at the life of all.³⁹

Statements like these illustrate the extreme, but make the point clear—where ego overwhelms a sense of connection, the survival-of-the-fittest mindset may be manipulated to horrific ends.

B. ECONOMIC huMANIFESTATIONS: Disproving Ghosts and Measuring Apparitions

The earliest conceptions of the “natural economy,” such as in the works of Linnaeus, a Swedish botanist from the eighteenth century, reflect the human superiority to nature that laid the groundwork for an exploitative economic relationship with nature:

All these treasures of nature, so artfully contrived, so wonderfully propagated, so providentially supported throughout her three kingdoms, seem intended by the Creator for the sake of man. Everything may be made subservient to his use . . . not so to that of other animals. By the help of reason, man tames the fiercest animals, pursues and catches the swiftest, nay he is able to reach even those, which lye hidden in the bottom of the sea.⁴⁰

It is not a brilliant revelation that economics as they have developed in the Anglo-American tradition have not done well to accommodate the natural world, much less to work in harmony with nature. The economic entitlement to all a person can collect and consume (known essentially as freedom) is a central tenet of our economic structure—and growth is predicated on continued consumption and waste. Yet, market economies do not necessitate a devalued environment.⁴¹ When it is an entitlement to own and

³⁷ *Id.* at 8 (quoting then Secretary of Agriculture Earl. L. Butz in a 1975 press conference).

³⁸ *Id.* at 8–9.

³⁹ *Id.* at 9.

⁴⁰ WORSTER, *supra* note 12, at 36 (1994) (quoting Linnaeus from his work *THE OECONOMY OF NATURE* (1749)). I wish to avoid the use of the general masculine pronoun reference, such as the use of “man” to represent “human.” I have left direct quotations in this Comment unaltered—though I have a strong inclination to substitute gender-neutral or feminine pronouns. I have attempted to strictly eliminate non-inclusive pronoun references in my own language. I think that language is powerful at socializing people, and consistent use of general masculine pronouns marginalizes large groups of people.

⁴¹ See generally WILLIAM McDONOUGH & MICHAEL BRAUNGART, *CRADLE TO CRADLE: REMAKING THE WAY WE MAKE THINGS* (2002) (challenging Henry Ford cradle-to-grave industrial processes inherited from the industrial revolution and the notion that industry must harm the

destroy a forest, a watershed, or a grassland, unfettered consumption is dangerous for us all. When the natural world is viewed in terms of utility for humans, use is the only way we know how to relate to nature.⁴² Economic assumptions reflect cultural ones, which in turn, affect our conception of nature.

Economic metaphor has been widely applied to nature. As ecology developed into a scientific specialization, scientists analogized natural processes to economic ones: food chains became “webs of commerce,” with “producers” (plants) and “consumers” (animals).⁴³ Natural processes became “industries” supporting larger natural “economies.”⁴⁴ Each process consisted of component parts valued according to humanity’s need or desire for them. Two problems emerged as a result. Not only does this language entrench the idea that nature has value only according to what we can sell it for, but for those parts of nature to which we assign no value, we afford no protection. Aldo Leopold recognized this problem in his home state of Wisconsin, noting that of twenty-two thousand species of plant or animal,

environment. They suggest a closed-loop manufacturing model where products are initially designed to be reused as industrial nutrients, hence cradle-to-cradle.). McDonough (an architect) and Braungart (a chemist) argue that being “less bad” only reinforces the assumption that our industry must pollute, at least a little. *Id.* at 45–67. Law not only regulates what cannot be done (dumping toxic waste in the river), but licenses that which it does not proscribe (the river can acceptably have so many parts per million of certain chemicals in the toxic waste). *See id.* at 61. These good intentions can only plug holes in this faulty industrial design. For example:

[T]hat comfortable chair you are sitting on. Did you know that the fabric contains mutagenic materials, heavy metals, dangerous chemicals, and dyes that are often labeled hazardous by regulators—except when they are presented and sold to a consumer? As you shift in your seat, particles of the fabric abrade and are taken up by your nose, mouth, and lungs, hazardous materials and all. Were they on the menu when you ordered that chair?

The computer your child is using—did you know that it contains more than a thousand different kinds of materials, including toxic gases, toxic metals (such as cadmium, lead, and mercury), acids, plastics, chlorinated and brominated substances, and other additives? The dust from some printer toner cartridges has been found to contain nickel, cobalt, and mercury, substances harmful to humans that your child may be inhaling as you read. Is this sensible? Is it necessary?

....

This book is not a tree.

It is printed on a synthetic “paper” and bound into a book format . . . Unlike the paper with which we are familiar, it does not use any wood pulp or cotton fiber but is made from plastic resins and inorganic fillers. This material is not only waterproof, extremely durable, and (in many localities) recyclable by conventional means; it is also a prototype for the book as a “technical nutrient” that is, as a product that can be broken down and circulated infinitely in industrial cycles—made and remade as “paper” or other products.

Id. at 3–5.

⁴² This is usually in terms of our current use or preservation of some piece of nature for use by future generations.

⁴³ WORSTER, *supra* note 12, at 291–96.

⁴⁴ *Id.* at 295–96.

less than five percent could be used: eaten, sold, or put to some other economic use.⁴⁵ Bad enough when we highly value something and pursue it to destruction, but thinking of the lives of wolves or coyotes as without meaning (or, as a predator, with a negative meaning) has led to wholesale slaughter. The wolf was eradicated in most of the lower forty-eight states. Except for a few small areas, the puma and the grizzly followed suit. More appalling is the method: the use of substances like compound 1080—sodium fluoroacetate—one of the most lethal poisons ever made, such that *one pound* of it could “kill a million pounds of animal life.”⁴⁶ Under the guise of “conservation,” from 1915 to 1947, ninety thousand coyotes died each year from the poison by lacing carcasses.⁴⁷ The impacts of the loss of coyotes (the subsequent rise in “pests”—quite the human-centered label—calling for more poisons, and so on) and the impact of that particular poison on ecological health as it coursed through animals and water supplies were duly ignored for the sake of human utility.⁴⁸

⁴⁵ LEOPOLD, *supra* note 1, at 210.

⁴⁶ WORSTER, *supra* note 12, at 258–59.

⁴⁷ *Id.* at 259. My feeling is that if the average person watched a coyote die of such poisoning, she would feel compassion for the animal, even painful sympathy, such that we might not have used compound 1080, but the experts handled the decision—experts who should have at least known that insects and birds and rodents would feed on carcasses lined with this powerful poison. See LEOPOLD, *supra* note 1, at 129–32 (1949) (describing his experience killing a wolf as a part of a conservation effort and explaining how watching the fire in her green eyes die was one of the formative experiences which led him to reconsider the human relationship with nature).

⁴⁸ Leopold described the impacts of the conservation movement’s efforts to eliminate wolves:

Since then I have lived to see state after state extirpate its wolves. I have watched the face of many a newly wolfless mountain, and seen the south-facing slopes wrinkle with a maze of new deer trails. I have seen every edible bush and seedling browsed, first to anaemic desuetude, and then to death. I have seen every edible tree defoliated to the height of a saddlehorn. Such a mountain looks as if someone had given God a new pruning shears, and forbidden Him all other exercise. In the end the starved bones of the hoped-for deer herd, dead of its own too-much, bleach with the bones of the dead sage, or molder under the high-lined junipers.

LEOPOLD, *supra* note 1, at 130–32. Here, conservation meant wiping out wolves as a threat to humans and livestock. In this way, the environmental movement has a nice name, but is a malleable human (political and economic) expedient. In the 1970s, an investigation uncovered that the Sierra Club, one of the nation’s most respected conservation organizations, had been investing its funds in many of the worst polluting companies in the world: General Motors, Exxon, and various mining and steel companies. BERRY, *supra* note 19, at 17. Berry argues that such actions are perfectly reflective of the cultural attitudes which separate mind and body, human and earth, and ideal and practice:

We are dealing, then, with an absurdity that is not a quirk or an accident, but is fundamental to our character as a people. . . . It is not just possible, it is altogether to be expected, that our society would produce conservationists who invest in strip-mining companies, just as it must inevitably produce asthmatic executives whose industries pollute the air and vice-presidents of pesticide corporations whose children are dying of cancer. And these people will tell you that this is the way the “real world” works. They will pride themselves on their sacrifices for “our standard of living.” They will call themselves “practical men” and “hardheaded realists.” And they will have their

Other than economics, we have little language for valuing the natural world. Attempts to value it in other human-centric ways, such as for aesthetic or recreational purposes, will almost always lose when pitted against individual human economic concerns: trees are boards, trees are jobs.⁴⁹ The secret is out—we can build houses out of rocks and mud and bamboo instead of trees. We can make paper out of things other than forests.⁵⁰ And we can make jobs out of collecting rocks or harvesting hemp.

Consumption is a part of nature's economy as well as the human economy. The chasm that separates the two systems is waste. In nature's economy, waste does not exist. Everything is recycled: excrement, dead plants and animals, water, soil, and rock.⁵¹ In the human economy, waste is abundant. Even manure, which we formerly put on our fields to maintain soil fertility by returning the nutrients to the ground that the crops soaked up, has been turned into a pollutant in our streams, lakes, and rivers.⁵² The

justifications in abundance from intellectuals, college professors, clergymen, politicians. The viciousness of a mentality that can look complacently upon the disease as "part of the cost" . . . is the "realism" of millions of modern adults.

Id. at 18.

⁴⁹ Yet, some of those who depend on trees for their livelihood share an intuitive sense that there is something wrong with the practice of logging. See JOHN VAILLANT, *THE GOLDEN SPRUCE: A TRUE STORY OF MYTH, MADNESS, AND GREED* (2005) (recounting the story of Grant Hadwin, an infamous Canadian logger, top-rigger, and naturalist who turned on the logging industry after playing a large part in the discovery and total destruction of several forests in western Canada). Two Canadian loggers describe their reactions to clear-cutting in British Columbia in the early 1980s. "It was like this big machine moved in . . . and began mowing it down. I can't bear to go back there now." *Id.* at 102. "We basically gutted the place. . . . I've made a good living . . . but sometimes you wonder if it's all worth it." *Id.* Cultivation of these voices is at the very heart of this piece's effort.

⁵⁰ See *supra* note 41.

⁵¹ LEOPOLD, *supra* note 1, at 214–20.

⁵² Ted Steinberg, *Down to Earth: Nature, Agency, and Power in History*, AM. HIST. R., June 2002, www.historycooperative.org/journals/ahr/107.3/ah0302000798.html (last visited Jan. 28, 2007). Steinberg elaborates on the impacts of putting our waste into our watersheds:

Ultimately, the rise of public water supplies, the flush toilet, and the building of sewer systems combined to divorce urbanites and their waste from the soil cycle. Instead of playing a part in bolstering soil fertility, human waste coursed into rivers, streams, and lakes, where it led some species of animal and plant life to flourish and others to decline markedly. The potential ill effects of transforming human excrement from an agricultural resource into plain, ordinary shit were not completely lost on contemporaries. . . .

Flush toilets and sewers not only removed urbanites from the soil cycle, they also helped cut people off from the environmental consequences of their behavior. City residents became increasingly ignorant of where their bodily waste wound up once they pulled the handle. But that did not stop human waste, with its high phosphorous content, from entering waterways, where it eventually caused algae to flourish in great amounts. The algae blooms, in turn, drained oxygen from the water and launched a chain of ecological consequences that at times helped reconfigure the species of fish that made up some of the nation's largest lakes. Rivers were similarly affected as sewage caused dissolved oxygen levels to plummet to the point where fish suffocated. These changes often occurred in places far from the original source of the waste itself, out of sight and thus largely, if not totally, out of mind.

Id. See generally STEVEN STOLL, *LARDING THE LEAN EARTH: SOIL AND SOCIETY IN NINETEENTH-*

most basic understanding of our relationship with the soil is drying up as we continue to further separate ourselves from experience with nature.⁵³ Again, where we ignore a service nature can perform, we replace it with chemical or mechanical substitutes, such as fertilizers, which further pollute water supplies and damage the health of life up and down the chain. Energy is no different. We create energy by breaking down sources, such as fossil fuels, into vast quantities of wastes which we can make no use of (notably breaking hydrocarbons such as those in petroleum into heat energy and carbon dioxide).⁵⁴ We turn natural assets into liabilities. “[W]herever the truth may lie, this much is crystal-clear: our bigger-and-better society is now like a hypochondriac, so obsessed with its own economic health as to have lost the capacity to remain healthy.”⁵⁵

C. LAW: The misJUS Reflection

We have experimented with law as a means to govern human relations for millennia, and we still have many kinks to work out. After all, forming a kind and respectful tribe of six billion people is no small experiment. At a staggering pace, though, humanity has threatened the billions of years of chaos and calm which cultivated life. Three hundred years of wealth-manipulated social organization later, and we do not have an extra millennium to dig ourselves out. Unfortunately and predictably, the laws that govern our relationship with the natural world reflect this cultural and economic hostility toward nature.

An undercurrent throughout the law relating to nature is that the environment consists of resources which are to be exploited as quickly as

CENTURY AMERICA (2002) (detailing at length the economic and cultural implications of human separation from and misunderstanding of the soil, resulting in the destruction of the agricultural *cycle* which once returned to the ground the valuable nutrients consumed from it as a means of sustaining soil health).

⁵³ BERRY, *supra* note 19, at 90–91. Berry remarks: “Not long ago I found that the manure from a saddle-horse barn belonging to the University of Kentucky was simply being dumped. When I asked why it was not used somewhere on the farm, I was told that it would interfere with the College of Agriculture’s experiments.” *Id.*

⁵⁴ *Id.* at 81–82.

⁵⁵ LEOPOLD, *supra* note 1, at ix. The social and economic consequences of this separation of mind and body, human and nature, are apparent:

The first principle of the exploitive mind is to divide and conquer. And surely there has never been a people more ominously and painfully divided than we are—both against each other and within ourselves. Once the revolution of exploitation is under way, statesmanship and craftsmanship are gradually replaced by salesmanship [[t]he craft of persuading people to buy what they do not need, and do not want, for more than it is worth]. Its stock in trade in politics is to sell despotism and avarice as freedom and democracy. In business it sells sham and frustration as luxury and satisfaction. The “constantly expanding market” . . . is still expanding—no longer so much by expansions of territory or population, but by the calculated outdating, outmoding, and degradation of goods and by the hysterical self-dissatisfaction of consumers that is indigenous to an exploitative economy.

BERRY, *supra* note 19, at 11 (bracketed material from n. *).

possible to support economic growth. A sketch of the law governing resources in the United States is revealing. Land: First in time is first in right.⁵⁶ Land went to the first grabber, and the winner had to “improve” the land or cultivate crops—use it. Water: Two rules. In the East, since there is a bunch of it, use it reasonably—but only if you own riverfront property.⁵⁷ In the dry West, be the first to use water as the locality sees fit (normally for the sake of development) and continue to use every drop, or you lose it.⁵⁸ Anything on, above, or under the land is property of the landholder, including “natural *resources*.”⁵⁹ All trees may be cut down. Put anything in the water. Kill any and all animals whether necessary or not, except if someone else has wounded the animal, because that one is hers.⁶⁰ This approach was the fastest way to develop the West, a planned and executed economic policy, and all of this entitlement came with the “freedom” to do almost anything to the land the owner wanted. This is the heart of Leopold’s criticism: “The land-relation is still strictly economic, entailing privileges but not obligations.”⁶¹ Economic motive will not respect nature’s limits—if the market is to make the necessary changes, we should refuse to be called consumers.⁶²

⁵⁶ See JESSE DUKEMINIER & JAMES E. KRIER, PROPERTY 11–19 (5th ed. 2002) (noting the “first in time” doctrine underlied the rush west in this country as our courts denied natives property rights). Though they lived on the land and were there first, they did not *own* the land because they did not cultivate and improve the land. Courts dusted off an old Roman legal principle—*Qui prior est tempore potior est jure*—and redefined “first” into second. Acquisition by capture was also an avenue to land ownership. Strangely, these rules were repeatedly justified on the principle of public peace—a quiet, legal theft.

⁵⁷ See A. DAN TARLOCK ET AL., WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY 111–14 (5th ed. 2002) (outlining the basic doctrine of riparianism as employed by eastern states).

⁵⁸ See *id.* at 158–62, 177–80, 257–60 (explaining the doctrine of prior appropriation and the standard of “beneficial use”). The “use it or lose it” approach destroys any economic incentive to improve efficiency, because a person who uses less water leaves that water to be appropriated by someone else. Colorado employs the doctrine of “maximum utilization,” encouraging the use of every last drop of water in the state. *Id.* at 199–204 (citing *A-B Cattle Co. v. United States*, 589 P.2d 57 (Colo. 1978)). Courts in a few states over the last few decades have expanded the definition of beneficial use to include such things as fishing, recreation, and other non-consumptive uses. Yet, largely, the water still must be *used* by humans to have protectable value.

⁵⁹ This rule is founded on another ancient property maxim—*cujus est solum, ejus est uque ad coelum et ad infernos*—“to whomsoever the soil belongs, he owns also to the sky and to the depths.” DUKEMINIER & KRIER, *supra* note 56, at 141.

⁶⁰ See generally *Pierson v. Post*, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805) (extending possession of wild animals—here, a fox described as a noxious beast—only to one who has ensnared or mortally wounded the animal, not to one who is merely in chase); *Ghen v. Rich*, 8 F. 159 (Dist. Mass. 1881) (assigning ownership of a whale to the party which had lodged its bomb-lance in the whale even though it washed up down shore and someone else took possession). These cases demonstrate the legal disposition that wild animals are property to be captured and used.

⁶¹ LEOPOLD, *supra* note 1, at 203.

⁶² If you take my meaning—we should change our *language*. There is a certain tidiness to the language of domination—tell them it is all free and made for them to consume. To think about the environment as a part of ourselves, we cannot continue to socialize people with a system of laws that treats nature as separate resources. Changing our language is not an end—re-naming beneficial use to beneficial relation or calling a bill the Healthy Forests Initiative does

Many would say that things have improved since our legal system was as outlined above. And “things” have improved. Some forests have been “saved.” Some species “protected.” “Nature” has not improved much as the roots of our legal tradition remain. Our legal system takes the aggregate of pollution and breaks it down into little pieces: CO₂, CFCs, dioxins, SO₂. Then legislatures, agencies, and courts try to plug the worst of the known holes—leaving out the myriad unknown reverberations that exist. The rules have acceptable limits—*licensing* pollution below the standards as part of the assumption that development must entail certain environmental costs.⁶³ When we look solely to law to guide our relationship with nature, what is not proscribed is allowed (and, over time, that allowance starts to feel like an entitlement). In these ways, we have tried to reduce the catastrophic to the merely tragic.

Our laws mirror many of the above basic cultural, scientific, and economic assumptions. The law is mired in commodification: the reduction of all things—pain, death, time, ideas, reputations, relationships, plants, and animals—to an economic equation. Eric Freyfogle explains the law’s poor relationship with the land in these terms:

From the perspective of land health, this focus is sadly and painfully incomplete. Many harms do not translate into dollar terms except by being mangled and miscast. Consider the case of Farmer A out on the Divide who broadcasts his powerful herbicide by airplane. The potent chemical drifts with the wind onto neighbor B’s prairie remnant, destroying hundreds of plants and diminishing animal habitat. Can B show economic harm when his field yields no financial return? If payment is made, will it cover diminished market value or, instead, the vastly higher costs of actual restoration? If this higher amount is paid, will B be under an obligation to actually restore the land?⁶⁴

Professor Freyfogle’s questions raise serious indictments of the way that law governs our relations with nature.

not change the substance—but such words influence how we think about the issue.

⁶³ Consider, for example, tradable emissions permits, where polluters pay for and pass around licenses to pollute. Or, for example, take the Clean Water Act. Federal Water Pollution Control Act of 1972, 33 U.S.C. §§ 1251–1387 (2000). The initial section describes the intent of the law was to END industrial discharges of pollutants into the nations waters by 1985. *Id.* § 1251(a)(1). Twenty years later, even after many successes, we are nowhere NEAR that goal. The irony is that the law is DESIGNED primarily to PERMIT pollution. *See id.* § 1342. Once you get a permit, discharges are fine. Permits are granted to discharge into rivers that are already over-polluted. And, over thirty years, environmental law has had little response to the call in 1972 for companion legislation to combat what the Clean Water Act recognized as a huge detriment to our nations water—non-point pollution, primarily agricultural runoff. This is about perspective and imagination. Efforts such as the Clean Water Act are not wasted ones. They are a valuable means for stemming the tide. Their passing brought the environment to the national conscience. But they will not save the environment. It is a step, but not the last step. When we recognize the limits of the law, we understand that we all must be involved in living in balance. No doubt those who wrote the Clean Water Act knew it was only playing one part of a larger effort needed to reach the end of zero water pollution. And that comprehensive plan to eliminate non-point pollution is not on the docket.

⁶⁴ Eric T. Freyfogle, *Ownership and Ecology*, 43 CASE W. RES. L. REV. 1269, 1282–83 (1993).

First, courts, in determining who has standing to have a complaint heard,⁶⁵ require that a plaintiff show:

(1) it has suffered an “injury in fact” that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.⁶⁶

With the help of science and calculators and experts, the court will determine if the plaintiff is suffering an economic harm. The government and the law use a similar standard in policy-making and administrative decisions regarding land use and resource allocation—employing cost-benefit analysis,⁶⁷ and environmental impact statements. Again, these are economic methods for weighing environmental harm—theoretical values assigned to relationships like biodiversity and recreational enjoyment. They purport to measure the

⁶⁵ The standing doctrine does not allow trees to come before the court. See Christopher D. Stone, *Should Trees Have Standing? Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 459 (1972). Harm to the environment that does no economic harm to any person will find little redress in most courtrooms. The goals have shifted some as the courts broaden the definition of economic harm, but cases where people generally suffer harm at an incremental pace have a difficult task to prove standing. For an outstanding discussion of standing as it relates to plaintiffs seeking to challenge greenhouse gas emissions, see Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1, 77–80 (2005). The human plaintiff with standing to sue for such a small injury faces a scientific battle in the courts that would bankrupt most people. Regardless of the relaxed standing rules, the tree is still out.

⁶⁶ *Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs., Inc.*, 528 U.S. 167, 180–81 (2000); see also *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992). Though standing has been granted where a person recreates regularly in an area, this is still an economically justified position (recreation equals big bucks in the economy, so it is protected in some limited ways). Justice Scalia virtually laughed out of court the arguments that were based in interconnectivity of ecosystems and in a valuable relationship with particular animals. These efforts were “beyond all reason” and go “beyond the limit . . . into pure speculation and fantasy, to say that anyone who observes or works with an endangered species, anywhere in the world, is appreciably harmed by a single project affecting some portion of that species with which he has no more specific connection.” *Lujan*, 504 U.S. at 566–67. Such an injury is not “perceptible,” because the law does not contemplate it. *Id.* When we get too caught up in the small standing advances for plaintiffs, we must remember that it is just a doorway to a courtroom, not to a decision favorable to the environment.

⁶⁷ Authors have written extensively on cost-benefit analysis (CBA), and my few sentences will obviously not do the nuances of the literature justice. For environmental perspectives on CBA, see COST-BENEFIT ANALYSIS: ENVIRONMENTAL AND ECOLOGICAL PERSPECTIVES, (K. Puttaswamaiah ed., 2002). It will demonstrate the economic specialization necessary to understand the literature. See also Amy Sinden, *The Economics of Endangered Species: Why Less Is More in the Economic Analysis of Critical Habitat Designations*, 28 HARV. ENVTL. L. REV. 129, 131 (2004). Sinden notes that the Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2000) has been described as the “pit bull” of environmental laws *because* it does not weigh economic interests against the loss of a species. Sinden, *supra*, at 139. The pit bull’s bark is stronger than her bite—*only after* we have almost completely eradicated a species (if we are scientifically aware of the harm) is it better to leave the natural environment intact in the face of a company’s well-financed desire to build a strip mall. That is our stiffest environmental standard? Our science and law dictate that the destruction of most of a species is not problematic—seems quite the presumption.

immeasurable, but the variables—known and unknown—make such quantification futile.⁶⁸ If the land “is injured in a way that the market does not value, the injury is irrelevant.”⁶⁹

Second, unless a plaintiff suffers an extraordinary and immediate harm, the court’s remedy for environmental harm is to reward the landowner with the damages proven in court—generally based on land values as the market defines them. This does not account for the actual damage done to the natural system which might require much more time and effort to accomplish even what little we can to reduce the reverberations throughout the chain.⁷⁰ Lastly, the law does not require the landowner to use the money to do anything to address the environmental damage, nor, if the polluter is not in violation of a statute, does it require violators to stop if they are willing to continue to pay damages.

As Freyfogle puts it, “[w]e cannot fully trace effects; we cannot calculate harm; we do not know how to play Earth doctor and restore full health once we create sickness.”⁷¹ If a farmer may devegetate land along a river because no one can prove personal economic harm, and that is the farmer’s right, we ignore the facts that less vegetation means less water retained in the soil. Less water in the soil means more irrigation is required. More irrigation means less water in the river for life that depends on it and greater erosion of loose soils into the rivers, carrying fertilizers and insecticides. The greater the silt in the water, the higher the salinity, which at a point, kills life in the river. The law’s solution might be to compensate downstream land or water right owners with money. But as long as the farmer stays below acceptable pollution limits, this interaction with nature, and the unknown chain of consequences, will go unaddressed. Economic harm, economic solution—still pollution.

⁶⁸ Sinden, *supra* note 67, at 197–200; Freyfogle, *supra* note 64, at 1280.

⁶⁹ See Freyfogle, *supra* note 64, at 1277. He continues:

By this decidedly anthropocentric gauge, most plants and animals are valueless and hence immaterial, and the law’s message is that we can rightly ignore them. The message from a distance—the message to the landowner out on the Divide—is that it is of no consequence that topsoil erodes so long as this year’s crop remains strong; it is of no consequence that the coyote is strung up or the creekbank eroded. When we talk in terms of injury measured in today’s dollars we inevitably place great reliance on our ability to see injury, to measure it, and to value it, which is to say that we treat our severely limited knowledge of nature as if it were complete. When money damages are paid the injury is remedied, or so the law tells us, as if the scarred and diminished land somehow benefited by the transfer of mere money.

Id.

⁷⁰ See Stone, *supra* note 65, at 461–62. Legal damages merely compensate the plaintiffs; they do not make the ecosystem “whole”:

The cost of making a forest whole, for example, would include the costs of reseedling, repairing watersheds, restocking wildlife Making a polluted stream whole would include the costs of restocking with fish, water-fowl, and other animal and vegetable life, dredging, washing out impurities . . . no money goes to the benefit of the stream itself to repair *its* damages.

Id. at 462.

⁷¹ Freyfogle, *supra* note 64, at 1283.

One final note about law, as I have experienced it through law school: the culture is harshly rational, to the exclusion of emotion. We are taught to be detached and unfeeling in the rigid application of rules to analogous fact patterns. Emotion and intuition are apparitions in most textbooks. Indeed, they are an enemy of “blind justice”—a phantom which has never existed. Blind judges who compute facts and spit out findings without an appreciation for the human element of law in each case that comes before the court do not fulfill the proper role of courts as an arbiter of our social compact.⁷²

This section does not call for the end of law as a means of governance. The understanding that our institutions reflect cultural assumptions, and that law as it exists is vastly incomplete in governing the human relationship with the natural world helps us realize that laws are not the only answer. If my approach is broad, I intend it to be. As Freyfogle points out, “the [law’s] main messages . . . are the things that count the most. Until these messages are healthy ones, the details mean little.”⁷³ One of the symptoms of legal education is the habit of looking at problems through a very narrow lens.⁷⁴ What is the rule in this city, county, state, district, or country for this particular individual or this precise set of facts? Right or wrong is primarily based on what has been done before; predictability reigns supreme. Legal solutions alone will not suffice without individual change. Though law has been the champion of major shifts in thought in the past, largely it is responsive to majorities acting through legislative channels—the responsibility for improvement lies on us all. It is on us to move forward in improved fashion, with an improved vision of what can be done.

III. THE POETIC SYLLOGISM: WILL LOGIC LET US DOWN?

The challenge lies in re-conceptualizing our relationship with nature, and in learning how to talk about it in terms not rooted in human use and consumption. At its heart, we need to *think* about our connection with this planet in different ways.⁷⁵ How?

⁷² Dicta.

⁷³ Freyfogle, *supra* note 64, at 1288. If anything, the law ignores the details of the particular ecosystems with its blanket application of laws to vast regions of the natural environment. See *id.* at 1277–78.

⁷⁴ But see ROLAND BLEIKER, POPULAR DISSENT, HUMAN AGENCY AND GLOBAL POLITICS (2000) (discussing the impact of individual acts such as dissident poetry on the development of international politics in a search for a break from ascribing agency on the international level only to states). Bleiker examines scholarship of international relations revealing the narrowness requirement for academic analysis in the field—invalidating the “topic that cannot be refined into a specific research project permitting valid descriptive or causal inference.” *Id.* at 19. Works which do not address a problem properly analyzed according to fact and subject to classification are not properly the subject of academic discussion. Bleiker argues that poetry and narrative, without hegemonically asserting answers to questions, are disruptive of this academic straightjacket—creating space for the individual to affect change. *Id.* at 18–19. Academic rules necessarily exclude many voices.

⁷⁵ “The world will not evolve past its current state of crisis by using the same thinking that created the situation.” McDONOUGH & BRAUNGART, *supra* note 41, preface (quoting Albert

The language of logic has done much to help us understand how some natural processes work, has allowed for their manipulation, and has also given us a glimpse of the harm we have caused. This language has formed a compartmentalized and reduced view of nature as a gigantic machine with parts that we can tinker with, and presumably—through scientific knowledge—repair.⁷⁶ However, reason is not without limits.

To learn to use a hammer is a great achievement of the rational mind—to reason the advantages of the use of a stronger object than our hands to break or form or grind another object is extraordinary enough to set us apart from most life on the planet—but to *feel* that we should not use the hammer against another human might make us unique.⁷⁷ Our most unique ability lies in a rich linguistic tradition which allows us to discuss motivation and emotion—we should be careful, lest we talk ourselves out of our better judgment.⁷⁸ Reason, like the hammer, is a tool; we use it to build conclusions from the materials of our experience, values, and desires.

Our rational capacities have made it possible for the human population to far outpace the natural balance—with modern technology we can provide food and necessary resources for a vast global population. Certainly, this is an amazing scientific achievement, but the costs to the environment are only beginning to show. While many countries have already come through industrial revolutions to establish themselves as technological states, the majority of the planet is just now poised to follow suit. The economic revolutions of the last two centuries encompassed a population far smaller than those of China, India, Africa, and South America likely following this century.⁷⁹ In only three hundred years, humans have had a very real and

Einstein).

⁷⁶ Our fixes have traditionally failed, predominantly because we try to treat the symptoms of environmental damage, without addressing the disease. Instead of avoiding climate change by addressing pollution sources, we react to droughts by creating drought-resistant crops. Drought forces people to grow the modified plant, and a monocrop develops, genetically altered and at much greater risk for disease or infestations because of the lack of genetic diversity. A traditional agricultural check employed, once we understood that insects like to eat plants and that blights might steal a crop, was cultivation of a variety of crops—if one was susceptible to a particular insect or disease, the rest would survive (reducing disastrous losses). This is the lesson of biodiversity, which we have sought to ignore with monocrops supported by expensive chemicals designed to wipe out any “pests”—the mechanized, factory-earth. Now we sound more like a disease.

⁷⁷ By comparison, Leopold felt that our compassion for a lost species demonstrates this unique quality. He describes a monument to a pigeon—that the region essentially eradicated—lamenting the loss of the species. LEOPOLD, *supra* note 1, at 108–12. That relationship with nature—the power to kill it and the tendency to mourn its loss—gives us a great responsibility.

⁷⁸ “Why did father give these humans free will? Now they’re all confused. . . . Father blessed them all with reason. And this is what they choose.” TOOL, *Right in Two, on 10,000 DAYS* (Sony BMG Music Entertainment 2006).

⁷⁹ See Andrew McLaughlin, *For A Radical Ecocentrism, in THE DEEP ECOLOGY MOVEMENT: AN INTRODUCTORY ANTHOLOGY* 257, 260 (Alan Drengson & Yuichi Inoue eds., 1995) (noting that extending the current consumption levels of the very rich to all nations, considering projected population growth, would be like multiplying the current ecological damage by twenty or thirty times). We must be wary of the way we use such an argument. Some might use this to sharply control and suppress the development of “developing” nations. I use it to demonstrate urgency.

detrimental impact on life four billion years in the making. If rationality, self-interest, and science will not pull on the reins, where might we be in another three hundred?

The answer is we do not know. We cannot know. Four billion years of this planet's existence and we have made written record for (generously) *six thousand* years.⁸⁰ That is a cosmic bat of the eye. Yet, we have written so much that it would be impossible to read all of it in one lifetime. Much less is it possible to study the length and breadth of all of time. Cold, factual, informed decision-making is an illusion—it is not possible to make use of all facts and hypotheses to make reasoned choices. Assuming we can model for all possible costs, side-effects, and ripples in the pond, is to play pretend. For an example, peruse the climate models scientists put forward to show the future effects of greenhouse gases on global climate. They are different—many, wildly different.⁸¹ Science has many more questions than answers.

Nevertheless, a quote from the Dalai Lama makes it alarmingly clear, “When man changes the environment at too rapid a rate, say, for example, by turning the oceans of oil in the earth's crust into a gas in the earth's atmosphere, he creates a situation in which the environment changes faster than his own rate of adaptation.”⁸² This warning has an intuitive ring to it: I *feel* that the thought represents a certain truth about the impact of our form of energy consumption. Yet the Dalai Lama has not offered CO₂ warming impact assessments as proof of his statement. He has not designed models that can repeat his hypothesis, controlling for differing variables.⁸³ While the specialist in atmospheric science may not be impressed, we should be wary of thinking that non-scientists cannot offer insightful and relevant comment on the state of the natural world and our relationship with it. For millennia, folk wisdom—the understanding of people based on practical experimentation—guided how we related to the world.⁸⁴ The notion that we

⁸⁰ See HENRI JEAN MATIN, *THE HISTORY AND POWER OF WRITING* 1 (1994).

⁸¹ See Konrad von Moltke, *The Relationship Between Policy, Science, Technology, Economics and Law in the Implementation of the Precautionary Principle*, in *THE PRECAUTIONARY PRINCIPLE AND INTERNATIONAL LAW: THE CHALLENGE OF IMPLEMENTATION* 97, 98–99 (David Freestone & Ellen Hey eds., 1996) (describing the role of science in guiding environmental policy despite the slow and incomplete nature of scientific knowledge). And these divergent opinions find their way to the advocates for both sides of the political debate as conclusive proof. See generally Eric J. Barron, *Climate Models: How Reliable are their Predictions?*, CONSEQUENCES, Autumn 1995, <http://www.gcric.org/CONSEQUENCES/fall95/mod.html> (last visited Jan. 28, 2007) (detailing the wide range of climate model predictions and the inherent complexities of climate change modeling, written for the U.S. Global Change Research Information Office).

⁸² William Irwin Thompson, *The Cultural Implications of the New Biology*, in *GAIA: A WAY OF KNOWING* 11, 17–18 (William Irwin Thompson ed., 1987).

⁸³ This usually means choosing *before* the research which variables will be relevant and which to ignore. A certain basic ignorance shows up at the start. Economic theory has a variable for the unknown—curiously enough—the controversial variable *Z*.

⁸⁴ This is a sentence to write a book about and is beyond the scope of this paper, but see, for example, Raffy Tima, Jr., *Lessons From History*, SE. ASIAN PRESS ALLIANCE (SEAPA), <http://www.seapabkk.org/newdesign/fellowshipsdetail.php?No=441> (last visited Jan. 28, 2007). Tima compares two Thai tribes' responses to tsunamis. One tribe had maintained, through their ancient oral tradition, their ancestral ability to read the Earth's signs for an impending

now have nothing helpful to say on the topic because we are not experts is a dangerous condescension.

Logic is rooted in classification. The basis for logical thinking lies in the categorical syllogism: Humans die. Jane is human. Therefore, Jane will die.⁸⁵ The logical thinker identifies a class (humans), analyzes Jane for characteristics that place her in that class, then places her neatly in the appropriate box. This process focuses on isolating difference and separating the parts of a larger system into organized categories.⁸⁶ That the natural world works solely by reference to these logical causal chains is highly unlikely.⁸⁷

Freyfogle illustrates an alternative to this mode of thought: the synecdoche or poetic syllogism.⁸⁸ This form of reasoning uses the particular to illustrate the general.⁸⁹ “Grass dies. Men die. Men are grass.”⁹⁰ It seems illogical, perhaps in the way it unifies “unlike” entities by a shared general characteristic—challenging what we “know” about men and grass.⁹¹ This syllogism, perhaps the way poets and schizophrenics think,⁹² seeks to match up consequents or predicates by way of specific examples of unities between subjects. Here, death unifies men and grass. This creates a way to unify by metaphor—the same way that Leopold sought to convince his readers—our existence in nature makes all living things the same.⁹³ Not convinced? Revisit the grass. Biologically, men are grass. When you break grass and men down far enough, they are made of the same stuff: lots of carbon atoms among other things. Poetically, men are grass. They share lungs with grass—grass breathes what men exhale, and men breathe what grass exhales. Without grass, men could not breathe.

tsunami—a receding tide leading to “monster waves”—and only one member of the village of two hundred did not survive the rising tide of December 2004. *Id.* Another Thai tribe, which lost much of their ancestors’ animist teachings as they integrated into society, suffered several casualties when many villagers, in response to the receding tide, went to gather crabs and fish. *Id.*

⁸⁵ See Gregory Bateson, *Men Are Grass: Metaphor and the World of Mental Process*, in *GAIA: A WAY OF KNOWING*, *supra* note 82, at 37, 44–46 (explaining the role of syllogisms in logical and poetic thinking); see also Freyfogle, *supra* note 1, at 228–30.

⁸⁶ Law students know well the emphasis on distinguishing difference—it is the primary tool of the attorney. We are trained to focus on difference and categorical placements. For an interesting discussion of the cultural separations the legal system perpetuates and reinforces with its focus on difference, see generally Hayward D. Reynolds, *Deconstructing State Action: The Politics of State Action*, 20 OHIO N.U. L. REV. 847 (1994).

⁸⁷ Bateson, *supra* note 85, at 43–44.

⁸⁸ Freyfogle, *supra* note 1, at 229–30.

⁸⁹ *Id.* at 229.

⁹⁰ Bateson, *supra* note 85, at 44.

⁹¹ See *id.*

⁹² *Id.* at 45.

⁹³ See, e.g., Roland Bleiker, *Forget I.R. Theory*, 22 ALTERNATIVES 57, 74 (1997) (examining the nature of poetry as a challenge to dominant modes of thought—it inherently calls into question linguistic and academic limitations on thought). Bleiker argues that the poet renders the usual—written language—unusual and forces the reader to confront the normal task of absorbing word symbols in a new way, freeing the subject discussed from the external restraints of language and social control. *Id.*

So, to demonstrate that nature communicates with you, I offer my own syllogism:

*Oceans of water leap to the pull of the moon.
You are nearly two-thirds water.
The moon pulls you.⁹⁴*

Now, if you don't speak the Moon's language, you might not hear her call. If need be, you might want to brush up on your Moonish. Leopold suggests "thinking like the mountain,"⁹⁵ so if you are behind on your Mountainian, you have a lot of studying to do.⁹⁶

Examples of learning by analogy to the natural world are many in literature, poetry, and philosophy. I will not be able to cover them much more than to offer one I think is intriguing. Martin Heidegger⁹⁷ told this story of an oak tree's conversation with a path that ran close to its roots:

The oak itself spoke, that only in such growth is grounded, what lasts and bears fruit: growing means this: to open [itself] to the expanse of the sky and at the same time to root in the darkness of the earth; all that is native only thrives

⁹⁴ See



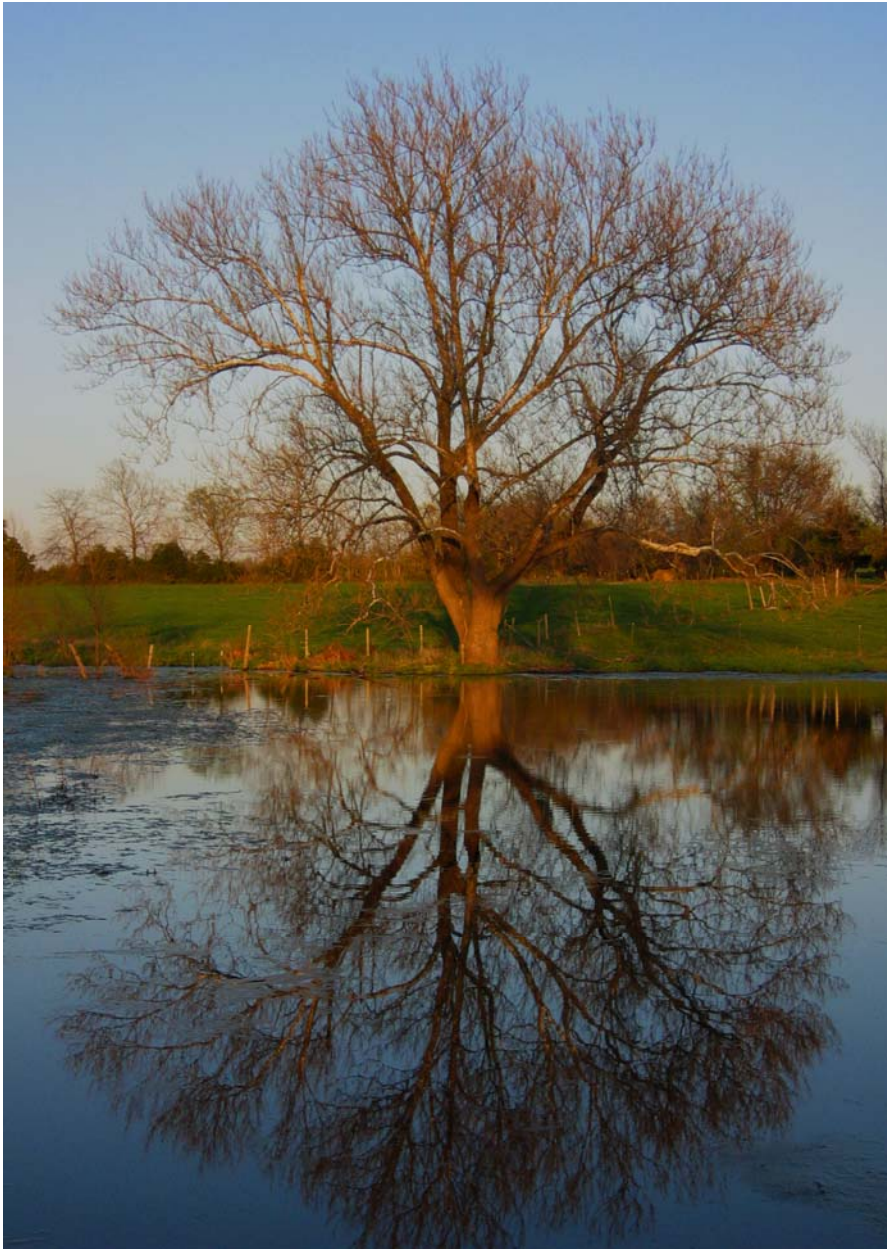
⁹⁵ LEOPOLD, *supra* note 1, at 129–30.

⁹⁶ Humor, here, emphasizes not that communicating with nature is laughable, but that many would laugh dismissively at such an idea.

⁹⁷ Heidegger is a post-modern philosopher—for those into classification—whom I cannot pretend to yet fully understand, but I continue to study.

when man is at the same time right by both: ready for the claim of highest heaven and kept safe in the protection of the bearing earth.⁹⁸

⁹⁸ Thomas A. Davis, *Meeting Place*, in HEIDEGGER AND THE EARTH: ESSAYS IN ENVIRONMENTAL PHILOSOPHY 77, 82 (Ladelle MacWhorter ed., 1992) (translating Heidegger).



JEFFREY JOHNSON, *THE SACRED SYCAMORE* (2005) (demonstrating the balance of the dual “make your home in the earth, reach for the sky” method of growth).

At the risk of simplifying, growth is a “double-movement”: rooting or dwelling in the earth simultaneous with an opening or reaching toward the highest aims.⁹⁹ True growth lies in reaching for potential while simultaneously respecting the potential of all life—to allow flourishing. Maybe you do not agree, but we should at least let the tree speak, and take a moment to listen and consider.

The *way* we think resonates in our conception of nature. Logic does not provide a basis for a relationship with a tree. Logic alone suggests such a relationship does not exist, or may render it valueless.

A. HUMILITY: Defined

Go. Visit the dark places development has left behind. Stand on a hillside, shaved clean of trees that stood for centuries. Do you feel more worthy than the trees to stand there? Sit on the bank of a river so poisoned you dare not touch the water. Breathe the air in Beijing and understand the plight of fish in that river. Unearth the drums of hazardous chemicals and nuclear wastes that lie in wait for future generations of life. Most, upon return from such experiences, would find the modern justifications for such carelessness weak and shortsighted. Yet, it is that which does not lend itself to words which might be most valuable—the sense that something is wrong with the way we relate with this world. In that feeling lies the foundation upon which we may build something more impressive than any physical or economic structure. The starting point: nature has an intrinsic goodness, not related to human economic use.¹⁰⁰

Human conduct, and the conduct of living things in general, is largely guided by survival. Prior to socialization, human conduct was based on expediency—actions chosen on the basis of that which most easily advanced the goal of staying alive. As humanity progressed, we advanced in our capacity to discuss right and wrong as a means to judge acceptable action. As societies grew more organized the range of actions judged by expediency shrank, and those judged by a communal sense of right and wrong grew.¹⁰¹ Thus, a philosophical ethic was born: a way to judge social and anti-social behavior in accord with the growth of populations and evolving modes of cooperation.¹⁰² The evolution of this type of ethic can be demonstrated by loose example: thou shalt not kill. This one began as “thou shalt not kill unless thou hast a good vengeful reason for doing so,” or

⁹⁹ Davis, *supra* note 98, at 85.

¹⁰⁰ Thus, it does not have a human-assigned value which can be manipulated. Once a dollar sign has been put on it, the value can be adjusted downward or eliminated. The value cannot be a legal absolute, either. The law could make nature more valuable than humanity. The hiker facing an attacking bear would have no right to kill the bear. Or, if humanity is made more important than nature, the hiker, in self-defense or for sport, may kill a bear. Neither works well for a bunch of reasons. Perhaps there is a middle ground based in what is natural; humans ought to respect the bear's need for space to live, but humans may also do what is necessary to survive if attacked—it would be unnatural not to fight the bear for survival.

¹⁰¹ LEOPOLD, *supra* note 1, at 202.

¹⁰² *Id.*

“unless thou knows one to be a witch or a heretic.” Thou shalt not kill anyone who is not property—slaves did not count and could be hanged or shot at will.¹⁰³ That lasted for quite some time—until laws against killing another’s slave, because that constituted destruction of property. The modern rule now extends to all human life, with smaller exceptions carved out for self-defense. Perhaps now, thou shalt not kill even some plants or animals, but only if they are on the verge of extinction or at least are very cute. Though life should not be considered an end to be pursued to extremes—such rigidity is stifling and dangerous—it should be respected as a tendency of the natural cycle.

An ecological ethic,¹⁰⁴ then, is similar—we can live in symbiosis. Certainly, some limitations on the freedom to destroy the environment have emerged over the last several decades, largely rooted in the law. Those limitations, however, are still predominantly judged by expediency—limited almost solely by economic considerations. Berry describes our responsibility:

The knowledge that purports to be leading us to transcendence of our limits has been with us a long time. It thrives by offering material means of fulfilling a spiritual, and therefore materially unappeasable, craving; we would all very much like to be immortal, infallible, free of doubt, at rest. It is because this need is so large, and so different in kind from all material means, that the knowledge of transcendence—our entire history of scientific “miracles”—is so tentative, fragmentary, and grotesque. Though there are undoubtedly mechanical limits, because there are human limits, there is no mechanical restraint. The only logic of the machine is to get bigger and more elaborate. In the absence of *moral* restraint . . . the machine is out of control by definition.¹⁰⁵

We need a new (old) interaction with all life, not just human life, and a re-cognition that what we do not yet know counsels that we are “wise to disrupt biotic communities as little as possible and only in pursuit of vital human needs.”¹⁰⁶

¹⁰³ Leopold recounts the tale of Odysseus returning from wars in Troy and hanging a dozen slave girls on a single rope for indiscretions while he was away. *Id.* at 201. They were property, and thus, were outside moral consideration.

¹⁰⁴ Ethic is yet another culturally and academically loaded term. I use the word to describe the communal extension of our rekindled connection with nature—the reflection of agreeing that nature has meaning. It is humility in relationships. I am aware that ethics have been employed many times in human history toward awful ends. My best defense is that I think we can and must do better. Freyfogle described Leopold’s craft in terms of his ability to, “by using nature, subtly and effectively mix the descriptive and the normative, the ‘is’ and the ‘ought’: as nonhuman nature was, so humans should be.” Freyfogle, *supra* note 1, at 227–28. Perhaps therein lies some middle ground.

¹⁰⁵ BERRY, *supra* note 19, at 94.

¹⁰⁶ Freyfogle, *supra* note 1, at 249. Certainly “vital” is one of the words that complicates this type of a statement of a rule. If applied as a legal principle, the term would likely be a fluid one, based on the same economic considerations we now employ. My argument is that a society that is honestly more appreciative of its connection with all of nature would be better suited to respect communal limitations. The greatest lessons I have learned on the connections we all share come from the woods. I think it is a commonality among all humans to be curious of,

So what would such an ethic look like? Some valuable suggestions lurk in the works of some brilliant philosophical and environmental minds. The most basic element begins with Aldo Leopold who felt we must add a sense of humility to our scientific understanding of nature. Certainly, we do not understand all of nature's processes:

At times, to be sure, we sense better. But in no setting is our knowledge as incomplete as it is when we talk about the complexities and interactions of nature's many parts. What we know of the Earth may fill libraries, but it is little more than one grain of sand on the beach. Nature is far greater than our knowledge of it, which means that humans are ignorant of nature and draw faulty conclusions from even the best forms of logic.¹⁰⁷

Again, one need look no further than the current debate over the effects of carbon dioxide and global warming. Climate models differ dramatically on elements of the past (causes and effects of climatic events), the present (which variables should or should not be included or controlled for), and the future (outcomes almost always vary widely). Yet there is a pervasive assumption that science knows best and will, in time, be able to reverse environmental degradation.¹⁰⁸ This is overconfident. Scientific knowledge is incredibly important to our understanding of the world, and Leopold, as a conservationist and scientist, agreed. To wield it as if we know how to control and manage all aspects of the natural world, as if we know what is and is not valuable in the community of life, is to adopt the conqueror role.¹⁰⁹

Humility can help pave the way to a view of humanity as a part of the natural world, not separate from it—grounded in the mystery and magic and power of the natural world. The tiniest things in nature are amazingly complex, intricate, and interesting, and are an unending source of wonder and imagination.¹¹⁰ The very connection which drew humanity to study,

ponder on, and study nature. To act as if the natural world has nothing left to teach—nothing important to inform our ingenuity—is conceit.

¹⁰⁷ Freyfogle, *supra* note 64, at 1283.

¹⁰⁸ See Leopold, *supra* note 1, at 204–05.

¹⁰⁹ *Id.*

¹¹⁰ See, e.g.,



ponder, and hypothesize about the nature of life on this planet, and which has inspired countless authors, painters and musicians, is one we can still draw on—we need not trade all magic for fact.¹¹¹

Humility might also include the ability to consider ourselves part of a life cycle longer than our individual lives.¹¹² If we attach meaning only to the time that we are alive, almost any action is justifiable. Unless you have your finger on a nuclear arsenal, most individual choices will not have an immediate impact on the planet's health.¹¹³ Judging against a short timeline of fifty or seventy years—less for many economic models—elevates the human lifespan over that of the redwood.¹¹⁴ That environmental planning often takes place

¹¹¹ PEARL JAM, *I'm Open, on NO CODE* (Sony Music 1996) (lamenting the night a nine year old boy traded in his magic for fact).

¹¹² The deep ecologists held such a view. They made a distinction between shallow environmentalism and deep ecology. They saw the trend toward shallow conceptions of nature—a lack of respect for interconnection and a reliance on technological solutions. Deep ecology, they argued, was a respect for the natural tendencies of life and for nature's lessons and limitations. This is a simplification of a complex environmental ethic developed by Arne Naess, George Sessions, Alan Drengson, and others. For an introduction, see Naess, *supra* note 14, at 3–12; Arne Naess & George Sessions, Platform Principles of the Deep Ecology Movement, *in* THE DEEP ECOLOGY MOVEMENT: AN INTRODUCTORY ANTHOLOGY 49, 49–53 (Alan Drengson & Yuichi Inoue eds., 1995). For some of the major criticisms of deep ecology, see TIMOTHY W. LUKE, *ECOCRITIQUE: CONTESTING THE POLITICS OF NATURE, ECONOMY, AND CULTURE* 1–27 (1997).

¹¹³ This is not intended to be disempowering. Individual decisions are everything—they reverberate with those around you and carry on to others through them. Viewing your actions as disconnected from your environment shelves responsibility.

¹¹⁴ *See*



These are some of the largest and oldest beings on the planet. I would no more cut these trees

over these short windows is problematic as well. One example from the economics of energy illustrates a possible advantage to this point of view: the windmill. When measured in twenty-year increments, a windmill does not compete with a coal plant for return of capital. Windmills take longer to pay off their initial investment than coal plants. So, most businesses or governments considering them perceived an economic disadvantage to investing in the windmill (a disadvantage which might not exist at all if coal companies were liable for the lung cancer that the particulate matter from burning coal causes—but then we might use more oil, gas, or hydroelectric, whichever is most expedient). When measured over a much larger window, say one hundred years, windmills become a much better investment: they require minimal maintenance, their source is theoretically unlimited, and the energy is clean. When businesses desire more windmills, the costs for building them decline as we perfect the technique for making them. Such ingenuity has been the hallmark of human beings.

Traditionally, people founded this sense of humility on their experiences in nature.¹¹⁵ Berry explains this tradition and the modern struggle:

Until modern times, we focused a great deal of the best of our thought upon . . . rituals of return to the human condition . . . a man would go or be forced to go into the wilderness, measure himself against the Creation, recognize finally his true place within it, and thus be saved both from pride and despair. Seeing himself as a tiny member of a world he cannot comprehend or master or in any final sense possess, he cannot possibly think of himself as a god. And by the same token, since he shares in, depends upon, and is graced by all of which he is a part, neither can he become a fiend; he cannot descend into the final despair of destructiveness.

. . . .

. . . [A]s we transformed the wilderness into scenery, we began to feel in the presence of “nature” an awe that was increasingly statistical. We would not become appreciators of the Creation until we had taken its measure. Once we had climbed or driven to the mountain top, we were awed by the view, but it was an awe that we felt compelled to validate or prove by the knowledge of how high we stood and how far we saw . . . We became less and less capable of sensing ourselves as small within Creation, partly because we thought we could comprehend it statistically, but also because we were becoming creators, ourselves, of a mechanical creation by which we felt ourselves greatly magnified. We built bridges that stood imposingly in titanic settings, towers that stood around us like geologic presences, single machines that could do the work of hundreds of people. Why, after all, should one get excited about a mountain when one can see almost as far from the top of a building, much farther from an airplane, farther still from a space capsule?¹¹⁶

down than kill a human. That does not make me anti-humanistic. I just cannot imagine any piece of paper or lodge pole that could possibly justify the end of these trees.

¹¹⁵ BERRY, *supra* note 19, at 100.

¹¹⁶ *Id.* at 99–100.

Creating space for ways to temper the almost singular dependence on reason and objectivity—neither of which exists in any pure form—by nurturing the emotive bonds which link human beings to the soil they are made of will help us to appreciate and realize harmony.¹¹⁷ Our current language for valuing the natural world is vastly incomplete and inadequate to provide for a respectful and responsible relationship. These pictures are potentially part of a new language—they display my kinship with trees and the moon—both are a part of my clan, my tribe. The contrary cannot be proven. Perhaps we all can be a bit more like Aldo Leopold, who “spoke not as the critic[,] but as the believer, and he enlisted supporters by the warmth and clarity of his own vision rather than by attacks on those who offered alternatives. His tool was the sun’s warm hope, not the wind’s sharp pen.”¹¹⁸

B. HUMBLE: Defended

“For the satisfied, these are questions without answers. For the seekers, they are answers without questions.”¹¹⁹

The dominant criticism leveled against radical environmental philosophy, and really, more consistently against any idea involving big shifts from present thought, is “how do we get there?” “What do we do in X situation?”¹²⁰ These are understandable questions, worthy of heavy consideration. However, when the **question** of *how* we do something becomes the **answer** to whether we *should* or *should not*, we have lost ourselves; the intuition which has guided human development for millions of years, our inner voice which has given rise to compassion, love, and empathy begins to fade. The argument that there are too many people and settled rights and institutions and investments to make wholesale changes in law or culture will only strengthen as a justification for the status quo as the world grows more populous. Some questions are not questions at all: *Should* all people be considered equal? *Should* you feed a starving person? *Should* you kill indiscriminately? The logistics of adopting these social givens of sorts have proven the things governments and legal systems are made of, against which powerful logistical arguments can be (and have been) leveled.

An argument made today employing logistical challenges as a justification against changing laws and minds to afford people of color political rights would be held repugnant. But even with years of practice this “equality” has not proven perfect, as the analogy from one race to another has been too thinly applied.¹²¹

¹¹⁷ See Freyfogle, *supra* note 1, at 227.

¹¹⁸ *Id.* at 227; see *supra* note 5.

¹¹⁹ DVD: Oregon in August (Vincent Capone 2005) (on file with the author).

¹²⁰ See Keith H. Hirokawa, *Dealing with Uncommon Ground: The Place of Legal Constructivism in the Social Construction of Nature*, 21 VA. ENVTL L.J. 387, 421–22 (2003) (discussing the struggle between theory and practice—the application of environmental ethics).

¹²¹ Indeed the Supreme Court did not reason for equal rights on the basis of: People are created with certain inalienable rights. Black people are people. Therefore, black people are created with certain inalienable rights. Our Constitution did not give the federal government the power to say that to the states, so the Court had to develop a tidy little economic rationale for

When pragmatism and practicality become paralyzing in the face of what we know to be right,¹²² they lose their utility. Human beings have proven much better at discerning how something works as they practice with its application than at predicting the future—extending reason to the unknowable. If we can demand respect for all people in the face of powerful differences, if we can demand respect for the ideal of institutions like our legislatures and our courts though they have often been the instruments of our own repression, we can respect the interconnectivity of life on this planet. Keith Hirokawa argues in defense of the pragmatic, that “such assertions alone[,] are not persuasive arguments for legal change,” because environmental ethicists have not proposed a “persuasive theory of environmental ethics that can be implemented as a social policy and integrated with the legal controls on the environment.”¹²³ I hope that we are not waiting for that book or piece of legislation to be written—likely the most complicated piece of legislation ever. I am afraid our Republic does not revolve so much around good ideas anymore, as around money—the key to the next election and continued power. Even if that legislation got to the floor, far too many big toes would have to be stepped on in the specifics. Too much money will be offered in the protection of those toes. Rivers had to catch on fire to spur our first environmental movement enough to adopt programs to stem the tide. How strong do the hurricanes have to get? How much will the polar ice caps—the engines of our planet’s water system—have to diminish? How many hundreds and thousands of species might we eliminate before the unraveling begins?

If the founders of this country began their grand experiment in democracy with a twenty-page document and a few major principles, we could agree to value and respect the Earth and all its life without answering how we will resolve every possible conflict which may arise. Then we can take our social policy and our legal controls and alter them as we go, instead of designing something piecemeal and without direction.

Examples of humanity’s continual expansion of its community, such as the U.S. expansion of civil and political rights to minorities, suggest a possible evolution of a communal ethic.¹²⁴ Our consciousness developed

demanding equal treatment of African-Americans. It went something like this: Black people have money and travel across state boundaries. Businesses and governments need money to keep the economy going (i.e., so it continues making us—the Royal Us—wealthy), therefore, we should definitely take black people’s money, too, without question. This is sarcasm, but not far from the rationale of the Court.

¹²² “Right” is a loaded term which I hope to not use hegemonically, and is likely a distinct debate for another time. My hope is that the reader *feels* that we should relate to the natural world differently, or is at least willing to consider more deeply the reasons for or against such a stance.

¹²³ Hirokawa, *supra* note 120, at 423. Hirokawa recognizes the importance of critical thought, but argues that it should not be used to keep people from taking practical steps to address environmental concerns. *See id.* at 422–23. I just want to be sure that we do not rely solely on this incrementalism.

¹²⁴ Freyfogle, *supra* note 1, at 233; *see also* LEOPOLD, *supra* note 1, at 202–03 (comparing the extension of ethical considerations to ecological evolution—growing as modes of cooperation grow). Charles Darwin observed this same historical pattern. Stone, *supra* note 65, at 450.

during competition that was often brutal. Survival meant teaming up. Where previously, people outside the tribe or clan would receive no moral consideration, communities have expanded—as people began to relate to, depend on, and include themselves in larger communities—into villages and towns.¹²⁵ Contemporary struggles illustrate the continued evolution of human community, such as the elimination of slavery—the view of human life as property—and the greater inclusion of different races, colors, and religions.¹²⁶ Perhaps our final evolutionary step in the development of community ethics is to recognize our symbiosis with the natural world and embrace it as a part of ourselves.¹²⁷

We *should* relate to the environment in radically improved fashion. I believe that is true, and I think that most people feel that we are not doing our best. It comes down to choice. Change happens fast now, speeding up as we go from hammers to language to religion to science to politics to television to cable to computers. And with the ground moving under us it is easy to see why people want to hold on to what they know—the familiar and the comforting. As we are picking up speed, what if we make wrong choices? What if we pick the wrong path? How quickly can mistakes become “the way it has always been.” We can change our ways; we need only decide to. In the words of Master Yoda, “Do, or do not. There is no try.”¹²⁸

I identify with the pragmatist because we both see problems with the human relationship with nature. I diverge from the pragmatist’s view of human nature—the focus on a perceived limitation of the human capacity to accept change—preferring to think of humanity as capable of the fantastic.

IV. THE HOPE

Things do not have to remain as they are. In fact, they won’t. Change will continue at a rapid pace along technological, political, and social trajectories. Resistance is futile, but we will have choices. I purposely stop short of suggesting particular legal or political fixes for “saving the environment.” People have great ideas about how we might create a world where saving the environment is not necessary—those people need some support.

I am concerned that though economic or legal institutions may not be inherently flawed, legal change rooted in the above-discussed assumptions

Authors of environmental philosophy, such as Leopold and Freyfogle, have turned to the examples of humanity enlarging its community as a way of illustrating the trend that as we grow, we identify more and more different people as a part of our communities (tribes, clans, villages, towns, cities, electorates, nations, etc.). They argue that this demonstrates that it is possible for us to expand our community further to include the rest of the living things on this planet. The argument here is not to prove with any exactness the evolution of human ethical consideration, but it draws on a demonstrated basic growing tendency of human beings to be social and empathetic.

¹²⁵ See Freyfogle, *supra* note 1, at 233.

¹²⁶ *Id.*

¹²⁷ *Id.* at 233–34 (referencing Leopold).

¹²⁸ STAR WARS: THE EMPIRE STRIKES BACK, *supra* note 13.

does not improve understanding and may encourage over-dependence on those institutions. For example, take the precautionary principle.¹²⁹ In U.S. courts and policy-making, where an individual or group wishes to affect the pace or approach of development, the burden to prove the negative impacts of a proposed action falls on the complaining party. That party must turn to scientific evidence to demonstrate economic or environmental harm (sufficient evidence to overcome the presumption that development in its current forms is beneficial). This is the basic form of risk assessment employed by U.S. courts, administrators and policy-makers.¹³⁰ The precautionary principle seeks to reverse that burden—where scientific evidence cannot prove that the action taken will be acceptably safe for the environment, the action should be curtailed.¹³¹ While this might be a helpful mechanism to slow development, if not coupled with growth in our view of the interconnectivity of all life and the meaning of that connection, we continue to rely on limited scientific and economic assumptions about the environment.¹³² The words change, but the meanings do not. Some would champion the principle as a victory for the environmental movement, and the word would go out: The experts have solved the environmental crisis—rest easy on your comfortable institutions.

By these arguments I do not mean to paralyze economic, social, or legal progress. I prefer to embrace possibility. The precautionary principle might be helpful, if seen as an incomplete but potentially useful *means* for putting the brakes on, which still requires a change in our definition of progress.¹³³ Without reconsideration of our relationship with nature and the way we value it, that law builds on a cracked foundation.

What I am suggesting is that a personal re-examination of our connections with nature might give us a new language for understanding the meaning (non-economic value) of the natural world and aid in the redefinition of life (in terms of what things belong in the category of “life” and what constitutes living). If we look beyond self—forward and backward—to see more than our life and the snapshot that history represents, we might develop a greater appreciation for possibilities and forget the limitations of the past. By listening to and developing our deeper

¹²⁹ For an extensive exploration of the precautionary principle, see THE PRECAUTIONARY PRINCIPLE AND INTERNATIONAL LAW (David Freestone & Ellen Hey eds., 1992).

¹³⁰ See von Moltke, *supra* note 81, at 99–100.

¹³¹ *Id.* at 101.

¹³² *Id.* For example, the precautionary principle still uses science as a means to measure risk. Risk is a determination of potentialities and acceptable consequences. *Id.* A continued reliance on incomplete scientific understanding of nature and on the current definition of acceptable risks does not change the situation much, as “acceptable consequences” is a term borne of adherence to the notion that we must necessarily pollute or ruin nature as part of our “struggle to survive.” The definition of “proof” remains the same, regardless of who must bring it to courts or committees or agencies.

¹³³ I think of progress as a learned process—an evolving standard—which builds on successes and mistakes from the past. I think that definition is at the heart of why humans record, why parents raise children. Passing the wisdom of our lives gives our tangible existences on earth meaning. We can learn from all types of cultures and traditions that have passed their wisdom to us.

understandings of the natural rhythm we may gain a better vision of the harm and disorder we have wrought. More importantly, we experience a positive connection, defeating the notion that we can only interact negatively or in trade-off with the world.¹³⁴ Ultimately, such a questioning can expose and unravel the basic assumptions we cart around which have undermined interconnection and defended our role as conquerors of the natural world. We can create space for the non-rational, such as empathy, intuition, compassion, wisdom—qualities we can all contribute to—in our laboratories and classrooms and governments and back yards. Such is the empowerment of the greatest human qualities.

We are humble when we realize the limits of our perception and thus, our knowledge. We are humble when we recognize the limits of rationality, relying on other forms of drawing conclusions as well. We are humble when we see ourselves in the light of our surroundings—when we are sympathetic to all life's desire to flourish. This modesty might translate into shifts toward more holistic understanding—commitment to cyclical patterns of nature—and to sharing moral value with other creatures and systems.

V. CHOOSE YOUR OWN CONCLUSIONS: OR CHOOSE ONE OF MINE

I began going into the woods to counteract what I felt was my fundamental incompetence about the natural world, drawn to it perhaps by instinct, as a place of learning. I could not smell a thunderstorm or understand quiet—at least, that is what I thought.

On my first night as an adult entering the forest to hike and seek solitude, I was met with great fear. The coyote's cry and the rustling of elk

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HUMAN'S BE CURIOUS.
EXAMINE FLOWER—THINK ^{BE} OF IT.
WATCH THE BATS AND MARVEL AT THEIR BATNESS.

I am nature. Pollution of the Earth is pollution of my body, as we are necessarily connected by the food I eat and the water I drink. My relationship with this part of myself is not all negative—contemplation of the natural is contemplation of the self. When nature shares wisdom, as in the lessons in the growth of trees, I improve based on the teaching. The one consistent response of life on this Earth to the Sun's warm energy—flourishing. See McDONOUGH & BRAUNGART, *supra* note 41, 118–19. Respecting flourishing entails a respect for the individual's growth, perspective, and uniqueness while emphasizing connection and community.

unnerved me in the dark woods. That fear is both instinctually and culturally rooted.¹³⁵ The wilderness is of course the home of some animals which might eat me, and our descriptions of the earth are often cast in the shadow of darkness—a murky, powerful, foreboding presence.¹³⁶ Think of *Hansel & Gretel* or *Little Red Riding Hood* as powerful ways to teach children to be afraid of the dark forest. We may respond to such a fear by withdrawing, shrinking from our place in the natural world, and ignoring “be-longing”—literally the desire (longing) to be here as an earth-dweller.¹³⁷ Gail Stenstad explains our options:

Such is the way of disconnectedness and contraction, a refusal of belonging that tends, finally, toward contraction into nothing. **Fleeing our mortality, we flee from what we really are: mortal dwellers, caretakers of the earth and what rises from it. This is a blind flight from the dark into ultimate darkness, from death toward death, refusing death only to bring [it] to everything earthy and alive . . .** there is another way to respond to the pull this earth has for us . . . the way . . . of connectedness and expansion. Here, we thoughtfully experience our be-longing to the earth in such a way that we desire to move with its moving. We are open towards heeding its saying . . . that is, our dwelling.¹³⁸

Our assumptions represent instinctual and cultural reflexes, which often lie unexamined and unquestioned, and they can resonate in poor constructions of ourselves, this planet, and life’s interconnectivity. But they are easy to change, if we so choose.

Worster recounts an experience that Thoreau recorded in his journal. The author wandered into a puddle near the swollen river, soaking his bare feet in the mud:

There appeared around his legs, swarming in a feverish mass, “a hundred toads . . . copulating or preparing to.” The amorous scene into which he had wandered was loudly celebrated by the ringing trill of the toads, a sound that seemed to make the very sod tremble: “I was thrilled to my spine and vibrated to it.” While on all sides of him the toads swam and leaped . . . in great excitement, the naturalist felt his limbs charged with new force, his singleness overwhelmed by the ‘one life’ of an animate earth. Without that sense of the vital energy in nature, man stands as an alien, severed even from the cold, inert lump of his own body.¹³⁹

My first reaction to this passage, I figure, was similar to most; I was a bit uncomfortable with standing barefoot in copulating frogs. I suppose, though, that reaction is a measure of where I stand in my relationship with

¹³⁵ I hope to more fully explore the fear of the dark as it influences our conception of nature in a future work.

¹³⁶ Gail Stenstad, *Singing the Earth, in* HEIDEGGER AND THE EARTH: ESSAYS IN ENVIRONMENTAL PHILOSOPHY 69 (Ladelle MacWhorter ed., 1992).

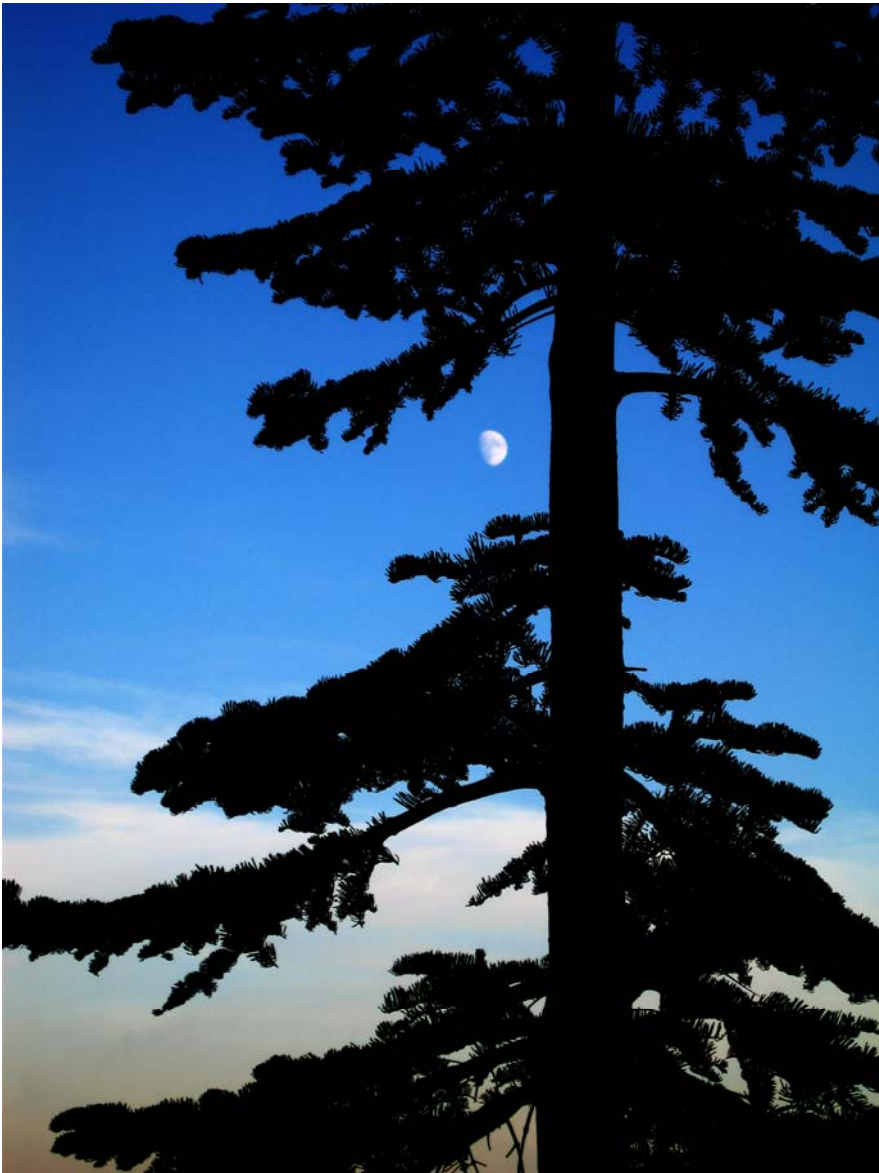
¹³⁷ *Id.* at 72–73.

¹³⁸ *Id.* at 73 (bold emphasis added).

¹³⁹ WORSTER, *supra* note 12, at 80.

the natural world. On further reflection, I searched my experience for parallels. I have continued to wander in the forest. I have stood under the Moon and in the river and among the trees.¹⁴⁰ I have felt the great energy which binds all life on the planet. It requires no special skill, just an open heart and an open mind free of the social shackles that might keep you from asking the earth to share some of that energy—once felt, the desire to return to it, to shed this alienation and separation for the oneness of existence, is strong.

¹⁴⁰ See



Some might not go. Perhaps out of fear of the dark or of the rain or of lions, tigers, and bears. Some may feel strange, after so long in disconnection, touching a tree to sense its life or rejoicing at the sound of crickets in the evening. Some may see no use in it. Yet in that connection and its attendant humility lies the only path out of this hubristic disaster we create each day. And I believe we all know it.

The world is fragile, and so are we, but our consciousness (and our accompanying conscience) may help us survive. Nature has a way of designing modifications over time which best suit balance and stability. Left to its own devices, it strives for equilibrium.