

AN EVALUATION OF ENVIRONMENTAL PRAGMATISM:
APPLICATIONS TO ENVIRONMENTAL ETHICS

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Abstract

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Environmental philosophy is at a crossroads; we, as philosophers, must make ourselves relevant in policy consideration, or more policies will be enacted that are inadequate for the protection of the environment. I believe this is achievable by environmental pragmatism. Using environmental pragmatism as a metaphilosophical tool, it is possible to transcend theoretical debate and focus on the common goals that environmental philosophers strive for.

Environmental pragmatism as a metaphilosophical tool deemphasizes debates over intrinsic or inherent value. This debate is responsible for much of the progress in environmental philosophy, but today serves as a deterrent in making environmental philosophy relevant to the political sphere. We should move away from applied philosophy and become practical philosophers; the situations encountered in environmental philosophy are diverse, and each has its own special considerations accounted for when determining what one ought to do or what policy to enact. The criteria for determining the success of a theory in a given situation is workability, otherwise a different approach is necessary.

Using the Exxon Valdez oil spill at Prince William Sound in Alaska, I examine various environmental philosophies using environmental pragmatism as a metaphilosophical tool.

Leopold's land ethic, deep ecology and social ecology all present various ideas on what one ought to do in this case study, with differing results. I conclude that with environmental pragmatism, the best course of action is more easily ascertained than by using monistic environmental philosophy.

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CHAPTER ONE

INTRODUCTION

Embosomed for a season in nature, whose floods of life stream around and through us, and invite us by the powers they supply, to action proportioned to nature, why should we grope among the dry bones of the past, or put the living generation into masquerade out of its faded wardrobe?

-Ralph Waldo Emerson, Nature

Blessed as we are with longevity, as biological organisms we live for only a short time in the history of Earth despite the best efforts of the scientific community. The written word lasts far longer, yet itself is as young in the history of Earth as a newborn taking its first breath. As Emerson so poignantly observed over one hundred years ago, humanity is wont to look back instead of forward, resulting in the saddling of future generations with the problems those living in the present have sown. Environmentalism as a movement has striven to stop this vicious cycle, and though as a whole it has had many successes, it has thus far ultimately failed in its ultimate goal: to stop environmental degradation locally and globally, to the advantage of present as well as future generations. This is quite at odds with the movement, since so much of it is dedicated to problems that traditional ethical theory either did not address, or proved inadequate to prevent the situation we find ourselves in at this point in the development of civilization. The answer to this problem is not simple; as with any question worthy of lengthy consideration, the answer itself raises many questions and draws upon many fields of expertise in even beginning to touch upon the truth. We will begin our philosophical journey by showing that traditional ethical theories are inadequate for capably prescribing what we ought to do in a given situation involving an environmental crisis or even prescribing how the environment in general should be treated. Instead, I recommend a more pragmatic environmental view, and use this view to evaluate theories in the following chapters. Chapters two through five will use the

Exxon Valdez oil spill as a case study through which to evaluate each theory. Chapter two addresses Aldo Leopold's *A Sand County Almanac*, focusing on the chapter in which he presents the land ethic. Chapter three is an evaluation of deep ecology. The conclusion, chapter four, will evaluate environmental pragmatism in general. The conclusion endeavors to illustrate how environmental pragmatism used as a metaphysical tool is a good approach when considering our environmental problems as well as how to do environmental philosophy.

After outlining the approach, it is now advantageous to shed some light upon why environmental philosophers tend to shy away from using traditional ethical theory to evaluate current environmental policies and problems. Traditional ethical theories have much to offer, and are the seeds from which environmental philosophy grows. These theories even serve to enrich our understanding of the environment. Aristotle's virtue ethics teaches us that people do not develop in a vacuum, that virtue is learned and habituated, not necessarily inherent, and that true happiness is deeper than just having a beer after a hard day at work. John Stuart Mill's utilitarianism shows us that just considering the individual is missing a very large point; that people effect each other, and the consequences of our actions may harm the individual while helping the whole. Sometimes the greater good requires individual sacrifice. Immanuel Kant shows us that people are not just means to an end, but ends in themselves, leaving us with the duty to treat each other with the utmost respect and dignity.¹ The problem with these traditional ethical theories is that they do not competently address the peculiar ethical situations that arise concerning humanity and the environment that we face today. Through no fault of their inventors, the theories were not elastic enough to remain as pertinent to the special ethical dilemmas we face as a global community. The majority of environmental philosophers feel that

1. Of course, these summations are vastly oversimplified, but hope to capture the spirit of the theories mentioned.

the moral extentionalism called for by Aldo Leopold is not captured in the bones of our past ethical theories as a whole. They are not completely dessicated, but neither do they possess the fortitude to adequately address the pressing ethical concerns of the nonanthropocentric world. Even Leopold's moral extentionalism calls for us, the people of human civilization, to open the door and recognize the moral considerability of the nonhuman world. It is only *post hoc*, after some value of the nonhuman world is realized, that we seek to rationalize this realization. Ecosystems, biospheres, and the nonhuman organisms in them do not have the ability to communicate or reason on the level that humans do to the best of our knowledge. The responsibility then lies upon the uncertain shoulders of humanity to speak for them.

The three most influential traditional ethical theories in the western world are those of Aristotle, Mill, and Kant. One may, and reasonably so, wonder why the most prominent ethical theories of the past are not up to the tasks environmental philosophy and environmentalism as a whole demands of them. Proving that these theories are inadequate to addressing the concerns of the environmentalist is worthy of a thesis by itself, but it is sufficient for our purposes to simply give a brief analysis to show that it is at least plausible that traditional ethical theories are philosophically ineffective at addressing the concerns of environmental philosophy.

At first glance, it is not evident that Aristotle's virtue ethics fail the test of environmentalism. After all, being anthropocentric is certainly not justification for environmentalists to throw Aristotle to the wolves. Human flourishing does not necessarily exclude nonhuman flourishing. The two even seem compatible, as one would be right to argue. It is worthy of note to observe that it is not readily apparent that nonhuman organisms are capable of cultivating the virtues, and therefore are only indirectly morally considerable under Aristotle's virtue theory. If this is the case, then although they may be indirectly considerable, it

is not necessarily the case that all organisms are protected to the extent that modern ecologists demand, since it is currently taken to be true that the ecological impact of taking even the smallest organism out of any particular ecosystem is difficult to measure, and may, in many cases, prove disastrous. As far as our environmental crises go, it is clear that the wrong thing has already been done, and we must figure out what ought to be done to fix it.

Mill's philosophy is often noted to, at the very least, explicitly entertain the idea that nonhuman organisms may be worthy of inclusion in the theory. Indeed, since it seems evident that animals can suffer, it does not seem contradictory to assert that utilitarianism adequately includes the nonhuman world. On a charitable interpretation, animals are equivalent in the utilitarian calculus to humans, since pleasure is good and suffering is evil. The concern of the environmentalist is that although animals can suffer, trees cannot. Ecosystems, biospheres and plants, if they can suffer, do not show any outward sign, and it seems unlikely that they do, at least under the human definition of suffering. Nor can they experience happiness in the way that humans do, if at all. Since Mill's theory rests upon notions of human happiness, it is not clear that the nonhuman world is adequately represented in the utilitarian calculus. Furthermore, “we have a *prima facie* duty not to harm moral patients, including not killing them... any adequate ethical theory must be able to account for the strictness of this duty.”² According to Regan, and it is my opinion correctly asserted, utilitarianism of Mill's type cannot account for this duty as a result of the egalitarianism present in the utilitarian calculus. The egalitarianism is an equality of the feelings; the equality of the individuals is not considered, rather it is the equality of their feelings. Regan supports this view, believing that “utilitarianism has no room for the equal moral rights of different individuals because it has no room for their equal inherent value or

2. Tom Regan, *The Case for Animal Rights* (Berkeley: California Press, 2004), 203.

worth.”³ The harm done in a utilitarian calculus is not done to the killed, but to the survivors.⁴

While seemingly attractive to environmentalism and laudable as an early step to more environmentally friendly ethical theory, Mill's utilitarianism fails to adequately account for the special concerns of environmental ethics.

Kant's moral theory rests upon the three formulations of the categorical imperative, of which Kant believes each to be equivalent to the others. Kant's moral philosophy as he presents it is dominated by the categorical imperative, demanding that we should not perform any act which we cannot at the same time will to become a universal law. The categorical imperative, no matter how compelling, still seems to give only indirect duties to animals. The standing of things, as defined by Kant, is on even weaker terms of moral considerability. Kant asserts that “beings whose existence depends not on our will but on nature's, have nevertheless, if they are nonrational beings, only a relative value as a means, and are therefore called *things*; rational beings... are called *persons*, because their very nature points them out as ends in themselves.”⁵ The only value available to a nonrational being with respect to an intrinsic/instrumental value distinction is instrumental value. An assumption that instrumental value is a lesser value compared to intrinsic value is made, which is an assumption that allows the environment to be used far more than if instrumental value were seen to be either less inferior or equal in some ways, even if not all ways. Kant explicitly states, “our duties towards animals are merely indirect duties towards humanity,”⁶ meaning that there are no direct duties toward animals. The only protection that animals have is based upon the possibility that if we treat animals badly,

3. Tom Regan, “The Radical Egalitarian Case for Animal Rights,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 86.

4. Regan, *Animal Rights* 204.

5. Immanuel Kant, “Rational Beings Alone Have Moral Worth,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 63.

6. Kant, 64.

then we may come to treat people badly, and as people are the only ends in themselves (part of the exclusive rational being club) we have indirect duties to treat animals in at least some minimally kind manner. Furthermore, “animals are not self-conscious and are there merely as a means to an end. That end is man.”⁷ This can be equated to the domination view of humanity’s role over nature within the stewardship/domination debate concerning the bible, a view that Lynn White thinks is the root of our ecological crisis. This is not without debate, but it seems correct to say that thinking one has dominion over nature could lead to more problems than thinking that nature is on a more level playing field. It seems that we are not obligated by the animals themselves but by the moral law; there is no other force urging us to accord animals or the environment the respect and dignity even remotely approaching the level accorded humans. To an environmentalist, this is very problematic indeed.

We are, and seemingly always will be philosophizing from an anthropocentric setting. It is not as if we could become a tree and see its viewpoint; even when “thinking like a mountain,” we are only thinking *like* a mountain, and have no way of verifying how, if a mountain could think, what it would think about. As Anthony Weston correctly asserts, “even the best nonanthropocentric theories in contemporary environmental ethics are still profoundly shaped and indebted to the anthropocentrism that they officially oppose,”⁸ while anthropocentric and weak anthropocentric philosophies are obviously rooted in anthropocentric concerns. Traditional ethical theory is generally extremely anthropocentric, and while this is not grounds to throw them out, the difficulties resulting from their formulation when applied to environmental ethics originally inspired the call for a new, “environmental” ethics.

7. Kant, 64.

8. Anthony Weston, “Before Environmental Ethics, in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 139.

It will be useful in our discussion to use a concrete case study to assist in analyzing deep ecology, social ecology, environmental pragmatism and Leopold's land ethic. The Exxon Valdez oil spill seems well suited to the task, since it is of recent memory, large scale and studied enough to be a case study well documented from beginning to end. On March 24, 1989, the Exxon Valdez oil tanker went aground, causing the tanks to rupture. In the following five hours, 1.2 million barrels of crude oil flowed into the Prince William Sound area off the coast of Alaska. Approximately fifteen percent of the shoreline in Alaska felt the effects of this oil spill.⁹ It was estimated that "357 miles of shorelines within PWS and 732 miles in the Gulf of Alaska needed" treatment to restore the environment for suitable habitation.¹⁰ The oil reached the shoreline despite the best efforts to contain it while at sea, including burning and the use of floating barriers. There are two fundamental categories of bioremediation: Ex situ, which requires the removal of contaminated materials to an area offsite, and in situ, which allows remediation to occur in the contaminated area. There are variations of both, but this is the most basic formulation of bioremediation strategies from which all other strategies emerge.

In the case of the Valdez Oil Spill, data was collected on site and it was determined that bioremediation would be a viable way to help cleanup the shoreline. At the time, EPA guidelines did not allow for bioremediation as a primary strategy, so they used bioremediation as part of a mixed strategy for cleaning up the contaminated soil and water. It was in effect a testing of the new technology in the field at Prince William Sound, guaranteed in an agreement by the EPA and Exxon Valdez in the summer of 1989, four months after the spill occurred.¹¹ In this particular case of bioremediation, restorationists used native oil-eating bacterium to restore

9. S.M. Hinton, "Bioremediation of Valdez and Prall's Island Oil Spills," in *Bioremediation: Science and Application*, SSSA Special Publication Number 43., eds. H.D. Skipper and R.F. Turco (Madison: SSSA 1995), 211.

10. Hinton, 212.

11. Hinton, 212.

the site. There was an attempt at introducing a laboratory engineered “superbacteria,” but it largely proved ineffective. However, when we use lipophilic fertilizers (fertilizers that are repelled by water, just as oil is) to increase the “carbon/nitrogen/phosphorus” content of the soil, the rate of oil consumed is greatly increased.¹² By monitoring the rate of hydrocarbon consumption, adding fertilizers “accelerates the rate of oil removal by a factor of five or more.”¹³ Such dramatic effect is exactly what environmentalism strives to achieve in general, though not everyone thinks so. This detailed summary serves to allow for the most competent analysis of the Valdez oil spill through the three theories previously mentioned. Each theory is analyzed with environmental pragmatism to explain the strengths and weaknesses of each. As the final portion of the introduction, a brief outline of environmental pragmatism will be given in order to evaluate the discussion in later chapters.

In general, environmental pragmatism is a pluralistic philosophy. By pluralistic, it asserts that no one environmental philosophy will have a satisfactory answer concerning what one ought to do in each situation.¹⁴ Within environmental pragmatism, there are essentially two kinds; metaphilosophical pragmatism, where one is supposed to “provide rules and principles within which environmental philosophy should be conducted,” and philosophical environmental pragmatism, which is “an attempt to generate a new position which engages fully with the already established theories of environmental ethics on their own ground.”¹⁵ Philosophical pragmatism seems rather straightforward, but metaphilosophical pragmatism may be in need of further explanation.

12. Victor de Lorenzo, “Blueprint of an Oil-Eating Bacterium,” *Nature Biotechnology* 24, no. 8 (2006): 952-953.

13. James R. Bragg, Roger C. Prince, E. James Harner and Ronald M. Atlas, “Effectiveness of Bioremediation for the Exxon Valdez Oil Spill,” *Nature* 368 (1994): 413-418.

14. Andrew Light and Eric Katz, “Environmental Pragmatism and Environmental Ethics as Contested Terrain,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 4.

15. Andrew Light, “On The Weston-Katz Debate,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 330.

According to metaphysical pragmatism, we must embrace pluralism and throw away prejudices against certain monistic theories. For example, many environmental philosophers look down upon anthropocentrism and weak anthropocentrism, even when they are a non-traditional attempt at creating a viable environmental philosophy. In contrast to ecocentrism and biocentrism, anthropocentrism is human centered. It does not necessarily take into account the fact that nonhuman organisms or parts of the environment have anything other than instrumental value. Weak anthropocentrism recognizes that there may be some nonhuman organisms or parts of the environment that have intrinsic value, or other value aside from instrumental value.

Looking down upon anthropocentrism and weak anthropocentrism may in fact be a hindrance to the philosophical process, since *prima facie* there is no reason that since a philosophy is anthropocentric it is necessarily inadequate as an environmental philosophy. Metaphysical pragmatists such as Anthony Weston¹⁶ assert that environmentalists need to cease the theoretical fighting amongst ourselves. One such issue is the debate over the intrinsic value of organisms and ecosystems. Summarized by Andrew Light, Weston argues, “the pursuit of intrinsic value stands in the way of philosophers wading into the moral swamps that represent the everyday world of environmental policy making.”¹⁷ Pragmatism of the metaphysical sort abhors the delay of meaningful contributions because one part of a philosophy seems incompatible with another; what is important are the things they have in common, especially when the prescription in a given situation is similar.

Environmental pragmatism has not been boiled down to principles, and having performed the task to some degree of satisfaction I understand why. First, I will list the principles, after which I will briefly offer an explanation for each.

16. Light, “Debate” 331.

17. Light, “Debate” 331.

Principles:¹⁸

1. Mind is not apart from the world, it is a part of the world.¹⁹
2. Emphasis on experience as the source of value.²⁰
3. Decreasing importance of theoretical debates.²¹
4. Placing of practical issues of policy consensus first.²²
5. The rightness of an action is largely system dependent.²³
6. Commitment to moral pluralism.²⁴
7. Denial that instrumental value and intrinsic value are ever mutually exclusive.²⁵
8. Purposive activity in thought, justifiable by workability.²⁶

These principles are fundamental to environmental pragmatism, and emphasize interrelatedness, the de-emphasis of theoretical dispute, moral pluralism and a focus on the practicality of our theories. Particularly important to our discussion are principles five through eight, which are more important to environmental pragmatism as a metaphysical tool.

Principle one addresses some of the foundational concerns of environmental pragmatism. Based upon pragmatism in general, it draws upon many aspects of early pragmatic philosophy that pragmatists can largely agree upon. One aspect that is of particular interest to environmental philosophers is that the mind is a part of the world, and not separate. Connected to the emphasis on experience, it recognizes the dynamic nature of reality, wherein “subjects and objects are nexus of relations in an ever-shifting universe of complex relationships.”²⁷ This is a recognition of the knower’s relationship with the known; the knower cannot separate from the known, because the known is transformed as the knower knows it. There is an “emphasis not on

18. These are represented for the sake of clarity, but in such a small space cannot do justice to the topics addressed.

19. Kelly Parker, “Pragmatism and Environmental Thought,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 23.

20. Parker, 30.

21. Light, “Contested” 5.

22. Light, “Contested” 5.

23. Parker, 26.

24. Parker, 32.

25. Parker, 34.

26. Sandra B. Rosenthal and Rogene A. Buchholz, “How Pragmatism is an Environmental Ethic,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 39.

27. Parker, 23.

substantial beings, but interrelations, connectedness, transactions and entanglements as constitutive of reality,” but focuses on a different aspect of ‘in the world’ pragmatic philosophy. In a pragmatist’s framework of thought, reality is “process and development... beings [are] rationally defined centers of meaning rather than as singular entities that simply stand alongside one another in the world,”²⁸ focusing on centers of relations and the relationships between subjects and objects.

Principle two emphasizes experience as the source of value. As part of the environment, we are part of experience; observant of the perception that all things are interrelated, pragmatism leaves us with an ecological model of experience. This ecological model recognizes that though different, each ecosystem and the organisms in them are important in the functioning of the whole. Pragmatism asserts that “where there is and could in principle be no valuing agent, there is no conceivable experience – and hence no aesthetic or moral value at all.”²⁹ As moral valuers, without experience nothing can be valued, because the value could not be perceived were it an attribute of the object, nor could the value be perceived were it as a result (as pragmatism asserts) of the interrelation and transformation of the world caused by the knower, or subject experiencing the known, or object.

Principle three, decreasing the importance of theoretical debates, is based upon environmental pragmatism’s focus on moral pluralism. This focus is dependent upon the empirical aspect of pragmatism, resultant of the observation that no one monistic ethical theory works in every given circumstance. It is not meant as “a unified vision of values and policy, but as a tool for effective discussion, mutual respect and the building of community,”³⁰ even though *prima facie* it seems that moral pluralism would have to be committed to a unified vision of

28. Parker, 25.

29. Parker, 34.

30. Light, “Debate” 14.

values and policy. Such is not the case. A recognition of the failings of monistic ethical theory does not exclude the realization that monistic theory sometimes prescribes the right thing to do.

Environmental pragmatism places policy consensus before theoretical debate because as consequentialists point out, our deontological concerns for the environment are trumped by the fact that if we fail, the deontological concerns will cease to matter. Though we may disagree on certain subissues, all environmentalists agree that something should be done about the rapid environmental degradation we see today. Therefore, although theoretical debates are important, they should not be pursued to the detriment of the formation and implementation of effective environmental policy.

In principle five, it is asserted, “the rightness of an action is largely system dependent.” This is a recognition of the interrelatedness of all organisms and objects as well as the dynamic nature of reality. As Daniel Botkin notes, “the answer to the question about the human role in nature depends on time, culture, technologies, and peoples. There is no simple, universal answer.”³¹ A modern ecological view of nature introduces an ever updated experiential perspective, whereupon the dynamic nature of experience, and even of knower and known, observer and observed, are accounted for, demand that the rightness of actions be system dependent due to the nearly infinite possibilities associated with an ever changing structure.

While principle six has been discussed as an integral part of some other aspects of environmental philosophy, namely principles four, three and one, principle seven is new and may seem contentious to many. The debate over whether organisms have instrumental, intrinsic value, or both has been a long standing issue, especially during the 1980's and early 90's. In the basic form of the argument, pragmatists propose that nothing “can ever be instrumentally

31. Daniel Botkin, *Discordant Harmonies: A New Ecology for the Twenty –First Century* (New York: Oxford University Press, 1990), 190.

valuable without at the same time possessing intrinsic value.”³² Anthony Weston goes so far as to argue that the debate over whether/how to assign intrinsic value to nature is a hindrance to the formation of policy since it has become a heated theoretical debate as well as moot if one accepts that just having some kind of value, no matter what, is sufficient to achieve the same aims in environmental policy.³³

The final principle is that our thought must have a purpose, whose worth is measured in workability as applied to actual problems. In pragmatism, the test of truth “is in terms of consequences... truth is not something passively attained, either by contemplation of absolutes or by the passive accumulation of data, but by activity shot through with the theory that guides it.”³⁴ Our theories for situation X are false if they produce consequences in situation X contradictory to the intended state of affairs after the prescription for said theory has been applied to situation X. The test of truth is graded by the consequences exacted by enacting the prescriptions of the theory.

Using the Exxon Valdez oil spill as an example, different theories within environmental ethics will be considered, then re-evaluated using the principles of environmental pragmatism. Using this method, each philosophy addressed will be evaluated on its own grounds, then examined according to the principles of environmental pragmatism, with the hope of presenting a strong case for framing environmental debates within some of the concerns of environmental pragmatism. Using this template, it is the hope of this philosopher and, I think, environmental pragmatists that philosophical debates over environmental issues will be more productive and result in policy congruent with the accepted commonalities of the environmental community.

32. Parker, 34.

33. This topic will be discussed in depth later in the text.

34. Rosenthal, 39.

CHAPTER TWO

THE LAND ETHIC

We know that the white man does not understand our ways. One portion of the land is the same to him as the next, for he is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother, but his enemy—and when he has conquered it, he moves on. He leaves his father's graves, and his children's birthright is forgotten.

--Chief Seattle, Suquamish and Duwamish

As part of the inspirational foundation of environmental ethics, Aldo Leopold's A Sand County Almanac has traditionally been interpreted as espousing moral extensionism resulting in a new ethic that includes the land. Leopold's chapter entitled *The Land Ethic* is often seen as the beginning of this new form of moral extensionism, and correctly so. The foremost interpreter of Leopold's land ethic, J. Baird Callicott, sees *The Land Ethic* as more than just a beginning. According to Callicott, *The Land Ethic* is an ethic in its own right, and not merely a call for enlightened environmental thought.

Leopold recognized in our culture what Chief Seattle did some time before; the land, at least in Leopold's day, was lacking moral considerability. Writing before environmental philosophy became a field, he noted "there is as yet no ethic dealing with man's relation to land and to the animals and plants which grow upon it...Land...is still property. The land relation is still strictly economic, entailing privileges but not obligations."³⁵ Within the field of conservation biology during Leopold's time, there was a fundamental split. Addressed in the land ethic, the split rests upon one side not realizing the importance of extending moral consideration to the biotic community. Followers of the A-Cleavage had not realized the necessity of such extensionism, while some, like his fellow followers of the B-Cleavage school of thought realized that the land was more than just soil and equations of organic chemistry. The

35. Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949), 203.

land was not only valuable for commodity production as the A-Cleavage viewed, but rather as biota, possessing a broader function.³⁶ Group B realized that the ecological nature of complex relationships accorded the land something more than the sum of its parts, much like how a city is more than just a city; it contains a society, social structures, etc. Leopold believed that there was a value in the land, “something far broader than mere economic value; I mean value in the philosophical sense.”³⁷ These stirrings are the beginning of what Leopold observes is the next step in our ethical sequence; it is the turning point in our ecological consciousness where we realize that the biotic community is morally considerable. This standpoint is not without question, however. It is worthy of note that while he says the biotic community has philosophical value, he does not say intrinsic or inherent value particularly. It could be of any type of value other than the instrumental value of a commodity producing object.

Leopold advocates viewing our relationship with the environment as a large biotic community, of which we are a part. He defines an ethic as “a mode of guidance for meeting ecological situations so new or intricate, or involving such deferred reactions, that the path of social expediency is not discernible to the average individual. Animal instincts are modes of guidance for the individual in meeting such situations. Ethics are possibly a kind of community instinct in-the-making.”³⁸ An ethic must bring to light the socially expedient path, whatever that may be, for the average individual. As animals, we possess instinctual reactions, which may be affirmed or denounced in the ethic, but in the end produce a paradigm of socially acceptable behavior that allows for the existence of community. Furthermore, ethics “has its origin in the tendency of interdependent individuals or groups to evolve modes of co-operation...all ethics so far evolved rest upon a single premise: that the individual is a member of a community of

36. Leopold, 221.

37. Leopold, 223.

38. Leopold, 203.

interdependent parts.”³⁹ Without cooperation, there is no need for ethics, since some form of self-interest would reign supreme. This is an ecological view, though somewhat at odds with the idea of competitive evolutionary ideas. This is not an issue for Leopold however, since ecology during his era recognized symbiotic relationships between species as well as cooperative relationships within the same species, such as wolves, lions, etc. while realizing that competition for resources still occurs.

Furthermore, Leopold also recognizes “a land ethic of course cannot prevent the alteration, management, and use of these ‘resources,’ but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state.”⁴⁰ As a member of the biotic team,⁴¹ and thus the community of the land, responsible use is called for and defended in as much as it is in the best interest for all involved, ecologically and ethically. We will always leave some kind of footprint behind, whether it be waste, use of resources, or alteration of the land. The ideal to strive for is to minimize this impact, an idea brought to the fore by the modern environmental movement.

What I have outlined thus far is what I take to be the *basic* ethical content within the land ethic. It may seem rather glaring that some parts normally accorded ethical content have been excluded, or that the ethical content seems to be rather scarce compared to the more canonical interpretations. The rest of the ethical content follows from these fundamental ideas, no matter what interpretation one holds. This is a result of a variance in interpretation with philosophers such as J. Baird Callicott, who attributes greater ethical content to the land ethic than I think is intended by Leopold. Following Bryan Norton's interpretation of the land ethic, the rest of this chapter will outline what further ethical content Callicott affords Leopold's work, with an

39. Leopold, 202-203.

40. Leopold, 204.

41. Leopold, 205.

examination of Norton's position and an explanation of pragmatic leanings within *The Land Ethic*.

Callicott wishes to interpret *The Land Ethic* as a complete moral theory, implicit though many parts of it may be. Callicott correctly asserts that Leopold has an historic observation that our ethics are evolving. This is roughly the basis for his theory of moral extensionalism. Callicott states that the liberation movements of the past few hundred years are “expressions of newly emergent moral ideals,” and that “ecological consciousness has if anything recently accelerated—thus confirming Leopold’s historical observation.”⁴² In the land ethic, Leopold recounts the story of Odysseus, in order to show how what he did upon returning home was ethical for the time, but would now be looked upon unfavorably, since we recognize the basic human rights of all individuals. This is, for Leopold, the ethical sequence, i.e., the sequence through which our ethics evolve over time just as ourselves and our complex societal structure evolves.

Finally, after laying the groundwork for the conceptual foundations of the land ethic, we actually get to see what Callicott thinks they are:

Its logic is that natural selection has endowed human beings with an affective moral response to perceived bonds of kinship and community membership and identity; that today the natural environment...is represented as a community, the biotic community...therefore, an environmental or land ethic is both possible—the biopsychological and cognitive conditions are in place—and necessary, since human beings collectively have acquired the power to destroy the integrity, diversity, and stability of the environing and supporting economy of nature.⁴³

Indeed, this interpretation does not seem to be unfaithful to Leopold’s endeavor, especially if one is used to a more ethical interpretation of Leopold. The human community came about as

42. J. Baird Callicott, “Conceptual Foundations of the Land Ethic,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 174.

43. Callicott, “Foundations” 178.

natural selection left only those human beings who cooperated with each other. The biotic community, (inclusive of humans) evolved so that today things are interdependent upon each other, according to Callicott presumably because the only ones capable of surviving were cooperative in nature. The result is that today, as we degrade the environment, we are in a place where we can realize what we are doing and place the limits upon our freedom⁴⁴ to ensure the survival of the species. The problem, it shall later be shown, is that it does not seem that Leopold meant to connote ethical content within his quote concerning integrity and stability. This is problematic for Callicott, since he views it as the “moral maxim” for the land ethic.

Norton points out that there is much evidence for an argument concerning the consistency of Leopold’s writings. Leopold

embraced the main philosophical elements of his land ethic early in his career, even while he was advocating predator eradication. These main elements include... important influences, hitherto unnoticed, derived from American pragmatism, a philosophical approach that Leopold borrowed from Arthur Twining Hadley who was president of Yale University when Leopold was a student there.”⁴⁵

In particular, this influence has implications for the meaning of stability and integrity in Leopold’s thought, since Hadley said ““The criterion which shows whether a thing is right or wrong is its permanence. Survival is not merely the characteristic of right; it is the test of right.””⁴⁶ This emphasis on the experiential evidence required for determining truth is a common pragmatic theme. Other evidence given in Norton’s account is too lengthy and would require straying from our project, but it is enough to show that there is concrete evidence for a pragmatic interpretation of Leopold’s land ethic. When studying the bulk of his work, it becomes evident that Leopold “regarded both anthropocentrism and its denial as representing only human

44. C.f. Leopold’s definition of ethics.

45. Bryan G. Norton, “The Constancy of Leopold’s Land Ethic,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 84.

46. Norton, “Constancy” 86.

conceptions, as artifacts of human perceptions rather than reality,” while also concluding that “non-anthropocentrism raises issues too intractable to make it useful in management discussions.”⁴⁷ This is consistent with Leopold’s thought in the land ethic, where he presents the A-B Cleavage toward the end. This is curious, since if he were to place more emphasis on it, it should come at the beginning. Furthermore, according to Leopold, the B group feels “the stirrings of an ecological conscience.”⁴⁸ This does not necessarily imply non-anthropocentrism, as Callicott asserts. What it does necessarily imply is an enlightened or weak anthropocentric view of nature, contrary to Callicott’s interpretation.

At the end of the day, Leopold felt that “the interests of humans and the interests of nature differ only in the short run. If we recognize the extent to which the human species is an integral part of the community of life, long-term human interests coincide with the ‘interests’ of nature.”⁴⁹ Evidence for this abounds, starting with his viewpoint as a conservationist. Leopold was well studied in land management practices, a field where one could see the interdependency of ‘man and nature’ more easily than most. Ecologically speaking, although the ecological science of his time did not account for the dynamic nature of ecosystems, his observation remains true today. That we are members of the biotic community is a recognition of interrelatedness, and not necessarily a recognition of equality. A holistic commitment to the biotic community does not imply egalitarianism *in simpliciter*, though it may imply egalitarianism at least on the ecological level.

In Norton’s critique of Callicott’s position, he begins by pointing out that Callicott claims that “value in nature is independent of human *valuations*. ”⁵⁰ Furthermore, “the measure of

47. Norton, “Constancy” 99.

48. Leopold, 221.

49. Norton, “Constancy” 99-100.

50. Bryan G. Norton, “Integration or Reduction,” in *Environmental Ethics: Readings in Theory and Application*,

objectivity, on Callicott's view, is the extent to which the central theory of environmental values succeeds in attributing human-independent value to natural objects themselves,"⁵¹ of which few options remain. On Callicott's view, ecosystems have their own inherent value, independent of human valuation.

According to Norton, here is where things really begin to break down, since "the general principle of "ecocentrism," so defined, hardly resolves the question of what beings in nature are proper owners of inherent value,"⁵² leading to theoretical paralysis of the type trying to be avoided. From a pragmatic view such as Norton's, this is crippling to any practical application that Callicott's view may attempt, since in order to protect natural entities worthy of protection, one must be able to figure out what entities have inherent value. This is perhaps the largest problem for the ontological vein of environmentalism as a whole. It is far more practical, as Anthony Weston points out, to recognize that natural entities have value of some sort, and this value is enough to achieve consideration in policy without having to prove ownership of inherent or intrinsic value.

The question that Norton feels necessary to raise now is whether it is "even plausible to say that multi-layered dynamic processes are owners of inherent value."⁵³ Callicott and deep ecologists both interpret Leopold's most famous comment, that "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community"⁵⁴ to have ethical content. The argument is that the statement implies that the ecosystem is the object of our protection, and that if we are to protect it then it must be an owner of value. Under Norton's interpretation of Callicott and Leopold,

5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 109.

51. Norton, "Integration" 111.

52. Norton, "Integration" 111.

53. Norton, "Integration" 120.

54. Leopold, 224-225.

Callicott believes that, by attributing integrity to the biotic community, *taken as a whole*, Leopold stepped across the line to non-anthropocentrism and declared his moral allegiance to the hypothesis that nature has inherent value. Our obligations to protect this integrity are “objective” in the sense that they originate in the integrity of whole agent/object which are morally considerable owners of their own value.⁵⁵

The interpretation that Norton believes to be correct is that Leopold’s comment is a practical remark on conservation management. This not only fits in with the writing of the section, which otherwise lacks ethical content, whereupon Leopold is telling us not what to value; rather, he is telling us what to protect. Norton writes that “on this reading Leopold was making the ontologically less committed, but none the less insightful point that, because of the complexity of the interrelationships in nature, and because there are so many different values exemplified in nature, the only way to manage to protect *all* of these diverse and pluralistic values is to protect the integrity of community processes.”⁵⁶ Finally, Norton argues that Leopold never intended to try to formulate any ethical principles. He left the door open for others to philosophize, and left guidelines for what ethics and mores needed developed, but never tried to develop them himself. Instead, he “deferred and turned humble, admitting the question of what their principles meant philosophically [was, and still is] ‘in a state of doubt and confusion.’”⁵⁷ It would be rather odd, would it not, if he had changed moods in the very next section of the essay and explicitly endorsed a full-blown theory of inherent moral goodness which implies that ethical communities are morally considerable beings with their own good?⁵⁸ Such an interpretation would leave Leopold looking less like the inspiration for environmental ethics and moral extensionalism and more like someone trying to get their thoughts in order.

55. Norton, “Integration” 116-117.

56. Norton, “Integration” 117.

57. Norton, “Integration” 118.

58. Norton, “Integration” 118.

Callicott's interpretation of Leopold is not taken lightly. After all, there must be a reason that his interpretation is still taught in environmental ethics classes, widely cited and taken to be the standard. One must remember that his interpretation was the earliest, most complete defense and explication of the land ethic. At the end of "The Conceptual Foundations of the Land Ethic," Callicott asks the question of whether "the land ethic is deontological or prudential."⁵⁹ His answer is that it is both. He focuses more on the deontological aspects of the land ethic, which seems to be a worthy enterprise, but the prudential aspects seem to have more historical evidence and emphasis within the text. Leopold's pragmatic leanings are evident throughout the text. It is argued here that his pragmatic tendencies are underemphasized in Callicott's interpretation in favor of recognizing and emphasizing the ethical content. Evidence has been given for the ethical content, as well as for Leopold's predisposition for more prudential concerns. The latter will be further addressed in some detail.

First and foremost, the major debate over Leopold's famous quote must be explored in further detail. Remember that Leopold states "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community." What exactly does this mean? It is, after all, the most often quoted part of the land ethic; is it perhaps the least understood? The integrity of a system can plausibly be taken as preserving the whole. When the integrity of a thing is compromised, it falls apart. To compromise a thing's integrity is to compromise its stability. If what we perceived before the compromising of said thing's integrity and stability was beautiful, then what we perceive after the compromise would tend to not be as beautiful as what we had perceived before, if the idea of beauty is at least partially loaded with preconceived notions of what to expect. Any act that causes the beauty of a biotic community to diminish under this definition is wrong.

59. Callicott, "Foundations" 185.

Alternatively, stability can be interpreted in a less strict manner. Stability might be a term that is burdened with preconceived notions of time, whereupon the stability of an ecosystem is measured by any number of ecological variables taken to be constants insofar as they relate to the maintenance of a particular ecosystem. This form of stability would maintain integrity, if integrity is taken to mean the continuance of the system. Beauty at this point could plausibly be taken as subjective, depending on the time the system was first perceived to be pleasing.

The point of this apparent digression has been to inspire a variety of ways in which the continued stability, integrity, and beauty of a system might vary, and thus affect the rightness of an action. This doesn't even consider the variety of actions that might preclude such a perception, nor account for the variety of actions that might follow said perception. In the case of Prince William Sound, under Norton's interpretation of Leopold, the land should be restored. All available action should be taken; this is the only option reconcilable with methods of land management. The typical conservation issue concerning restoration of what point in time the habitat should be restored to is solved, since the objective is to restore it as close to its pre-spill status as possible. The ecological community must be maintained, and as members of the community we must do our part. Future spills should be prevented, and ideally avoided altogether. I take Leopold's position on this matter to be in accordance with what practical methods of restoring and protecting the environment demand.

Some of the ethical content attributable to Callicott's view is attributable in terms more consistent with Leopold's scientific conservationalism. Cooperative communities are as ecologically beneficial as they are ethically, even under an interpretation of the land ethic that lends itself toward the highest concentration of ethical content. While Callicott takes the farmer's actions in Leopold's section entitled "Substitutes for a Land Ethic" to be a product of

unethical practice, it is just as easy, and perhaps advantageously more simple to attribute it to bad management practices. Even Callicott's commandmentesque statement of what one should and should not do according to the land ethic can be interpreted as methods of land management, instead of containing immense ethical portent:

According to the land ethic, therefore: Thou shalt not extirpate or render species extinct; thou shalt exercise great caution in introducing exotic and domestic species into local exosystems, in exacting energy from the soil and releasing it into the biota, and in damming or polluting water courses; and thou shalt be especially solicitous of predatory birds and mammals. Here in brief are the express moral precepts of the land ethic.⁶⁰

While these statements could be ethical, and some believe that they are, it cannot be ignored that they can just as easily be attributed to good land management. We do not know with certainty which species are expendable within an ecosystem prior to their extinction; we do not know how many or which exotic species a system may absorb before becoming irrevocably dissimilar to its former self, for better or worse; we cannot predict with certainty what the tolerances of particular pollutants within an ecosystem are, just as much as we cannot predict with certainty the effect of damming a river will have on the local ecosystem. The simple fact is that too many variables exist.

We must be especially solicitous of predators because, ecologically speaking, they are at the top of the food pyramid, and to ignore their place is to be in danger of devolutionizing the food pyramid down to omnivores and herbivores. Predators play a part in the ecosystem as important as any other, though we often find their role inconvenient to our own desires. There is no reason to say that these commandments are exclusively moral in nature, or pragmatic. Callicott recognizes this fact, but tips his hat in favor of ethical content, while Norton tips his hat

60. Callicott, "Foundations" 182.

in favor of the more prudential aspects. Both have a valid concern; Callicott wishes to improve the status of moral extensionalism that Leopold begins, while Norton wishes to bury the theoretical debates in favor of resolving our pressing environmental needs. Both are necessary, but for different reasons. Pragmatically speaking, we must find the land ethic to be both, but focus on the solutions it offers, and avoid theoretical black holes. Leopold's land ethic opens the door to moral pluralism, since no particular ethic is espoused within it. Stemming from land management, it recognizes that each situation is different, so that what one ought to do in a particular situation changes depending upon circumstance.

CHAPTER THREE

DEEP ECOLOGY

Future historians may well be amazed by our distorted sense of proportion. How could intelligent beings seek to control a few unwanted species by a method that contaminated the entire environment and brought the threat of disease and death even to their own kind?

--*Rachel Carson, Silent Spring.*

Deep Ecology in its original form seeks to give back our sense of proportion in the world.

While seeming like a utopian guide for living in harmony with the environment as much as possible, it fails the test of environmental pragmatism, essentially becoming untenable in certain concrete situations. Yet, a full explication is still in order to prove this claim. As an ecocentric philosophy containing elements of biocentrism, it rejects the idea that man is independent from nature in favor of a more holistic view, whereupon relations exist between man and nature in the biosphere. In principle, it advocates ecological egalitarianism, where plants, animals, and humans have an equal right to flourish. This signifies a shift different and more extreme than previous environmental philosophy, in that it attempts to move toward an understanding that goes beyond anthropocentrism. Using these concepts as a foundation, the philosophy neatly flows to its logical end:

1. The well-being and flourishing of human and nonhuman Life on Earth have value in themselves. These values are independent of the usefulness of the nonhuman world for human purposes.
2. Richness and diversity of life forms contribute to the realization of these values and are also values in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy *vital* needs.
4. The flourishing of human life and cultures is compatible with a substantial decrease of the human population...
5. Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must therefore be changed. These policies effect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.

7. The ideological change is mainly that of appreciating *life quality*... rather than adhering to an increasingly higher standard of living...
8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes.⁶¹

As inherently ecological in its approach, deep ecology avoids supposed unenlightened anthropocentrisms while simultaneously offering what *seems* to be a workable environmental ethic.

The motto of deep ecology is “Simple in means, rich in ends,” inevitably leading to assumptions that this philosophy must be a viable alternative to our current lifestyles. Change that we can tell would be for the better is, after all, better than change just for the sake of change. Yet, it may not be as easy for everyone to live as Arne Naess does, in a shack on a mountain, recycling toilet paper for fuel, and doing so happily of their own free will. Naess himself writes that “A philosophy, as articulated wisdom, has to be a synthesis of theory and practice,”⁶² sounding suspiciously like a pragmatic philosophy. Yet, just as all that is gold does not glitter, it is also true that all that glitters is not gold. When analyzing deep ecology, it becomes apparent that the synthesis between theory and practice is incomplete.

Tenet one of deep ecology states that the well-being and flourishing of human and nonhuman Life on Earth have value in themselves. These values are independent of the usefulness of the nonhuman world for human purposes. This is a nice way of sidestepping the problem of attributing intrinsic value to nature, since it is the well-being and flourishing of human and nonhuman Life on Earth that has the value, and not the organisms themselves. Yet, deep ecology still wishes to recognize intrinsic value in the individual organisms, an idea

61. Bill Devall and George Sessions, *Deep Ecology* (Salt Lake City: Peregrine Smith Books, 1985), 231.

62. Arne Naess, “Ecosophy T: Deep Versus Shallow Ecology,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis P Pojman and Paul Pojman (United States: Thomson Wadsworth, 2008), 220.

espoused more explicitly in tenet two.⁶³ To date, arguments over whether intrinsic or inherent value might be attributable to organisms other than humans has not been solved, and indeed, may represent a hindrance to the progress of environmental philosophy, a view addressed by Anthony Weston and examined later in this chapter.

Tenet two of deep ecology recognizes biodiversity as another value, since if the natural processes of a functioning, healthy ecosystem are to endure, a great many organisms must participate. This is valuable both for its own sake as well as to the ecosystem. Ecologically, biodiversity is often cited as the measure of the health of an ecosystem; the greater the biodiversity, the more healthy the ecosystem. All life forms, down to nitrogen fixing bacteria in the soil to wolves culling the weak from the herds, are valuable and essential to the functioning of the system. All organisms are intrinsically valuable.

Tenet three is perhaps the last philosophical foundation rock, and logically follows from tenets one and two. Essentially, humans should not seek to harm or undermine the richness and diversity of the biosphere unless necessary. Deep ecologists often argue, and rightly so, that most people do much more than just satisfy their vital needs.⁶⁴ A vital need would be something necessary for survival, such as food, water and shelter, among others. Vital needs differ depending on where one lives, and does not exclude technology, since some things are vital to function in today's society that were not necessary in previous periods in history. Non-vital needs would be having an extra car, a swimming pool, etc. If we can live without it and still function in today's society, then it is not a vital need. Though deep ecology espouses a return to

63. Naess, 231.

64. Vital needs are not adequately defined in any of the literature. This seems to be a result of differing vital needs in different circumstances. In our society, vital needs include some basic technologies, since a return to nature for civilization as a whole is considered impractical, even by deep ecologists.

nature of sorts, it recognizes that a full return is not possible for civilization as a whole.

Nevertheless, we should at least minimize our impact on the environment.

Tenets four through eight are focused more upon *how* to accomplish the first three tenets.

By attempting to paint a possible worldview where humans are more in nature than above it and trying to dominate it, humanity is able to be a peaceful member of the biosphere, instead of a dominating monarch. Scholar Carolyn Merchant writes that

reinhabiting the land as ‘dwellers in it’ rejects industrial society as the world paradigm for development and entails leaving vast tracts of land as wilderness. People can live their lives as ‘future primitive’ withdrawing from developed land and allowing it to reestablish itself as wilderness. For each ecological region, the guideline for use should be human carrying capacity.⁶⁵

One may argue that we already have human carrying capacity in much of the world today. We are currently over maximum occupancy for Earth as a whole, given the food shortages and degeneration of soil and water quality. To be certain that we are dwellers in the land, we must take responsibility and be certain that our numbers do not negatively impact the local biosphere in which each community resides. This is consistent with a significant decrease in population, which I discuss later. This all hinges upon the requisite change in our ecological consciousness, fostered by a recognition that our current consumptive, industrial and destructive lifestyles are not sustainable on a global scale. The solutions are simple to espouse; we simply need to reduce the world’s population, stop our current environmental interference and support these changes with concurrent policy. This also includes abolishing the current trend of environmental injustices, unfairly burdening minorities and the disadvantaged.

Several problems arise. First, such sweeping change is not easy to implement, since any change in ecological consciousness will not happen at the same moment for each individual, if at all. This makes many of the latter tenets (4-8) a bit worrisome. In particular, tenet five seems

65. Carolyn Merchant, *Radical Ecology: The Search for a Livable World* (New York: Routledge, 1992), 87.

problematic, since most will agree that there really is too much human interference with the environment, with a large portion of the interference being negative. Nonetheless, proponents of deep ecology have devised workable methods for living the type of life that deep ecology so earnestly calls for. Even this is not free of suspicion. In 1981, Duane Elgin wrote Voluntary Simplicity: Toward a Way of Life That is Outwardly Simple, Inwardly Rich. Oddly, this is the motto of deep ecology, but no mention of deep ecology exists within the work. It simply draws upon many of the same inspiring insights from the world's religions and applies them to life, without concern for the philosophical disagreements, and succeeds in creating a remarkably powerful suggestion for how to live. The suspicious part is that this practical approach of simple living does not need the philosophical power of deep ecology to give it weight. On the other hand, Bill Devall's book Simple In Means, Rich in Ends: Practicing Deep Ecology, published in 1988, is, and could be argued to be less successful in its endeavor, for various reasons, though Elgin is mentioned in his work.

In his work, Devall espouses a type of voluntary simplicity that is consistent with the tenets of deep ecology. In this wonderfully insightful guideline for a newer, healthier lifestyle, Devall recognizes that "some of the lifestyle choices consistent with a deep ecology position are deviant from average or expected behavior in the dominant culture,"⁶⁶ an observation supporting the need for a change in ecological consciousness.⁶⁷ Devall insists that we must resist appeals and advertising aimed at causing us to consume more for the sake of the economy, and instead cultivate what Naess called the "absence or low degree of novophili—the love of what is new

66. Bill Devall, *Simple in Means, Rich in Ends: Practicing Deep Ecology* (Salt Lake City: Peregrine Smith Books, 1988), 83.

67. Though outside the scope of this paper, one might be tempted to quip that perhaps it is not a change in ecological consciousness that is needed in some people but the creation of an ecological consciousness.

simply because it is new.”⁶⁸ Furthermore, Devall rightly concludes, “voluntary simplicity is not self denial but a more compassionate approach to living and consideration for the vital needs of other creatures.”⁶⁹ Two important observations drawn from this exposition of living deep ecology as consistent with voluntary simplicity are that on the personal level, understanding and living by the tenets of deep ecology is not necessary to live the type of life that Devall endorses. This endorsement also excludes a required change in ecological consciousness.

On the larger level, conservation biologists use deep ecology to “select and design the boundaries and management strategies of parks, nature reserves, wildlands, and biosphere reserves.”⁷⁰ They can even help mitigate the impact of technology on the environment. With all of this in mind, one has to wonder why there is a long-standing debate between supporters of ecological restoration and deep ecologists. The topic of ecological restoration centers on tenets two through five in particular. With such a “deep” respect for the environment, it seems that one should be for environmental restoration, but such is not the case with deep ecology.

The type of environmental crises the world is faced with today are many and varied. Yet, there is a recurring theme among them all: The problem has already occurred, so given this state of affairs, what can we do about it? All environmentalists are concerned with preservation and conservation of rapidly dwindling habitat, cleaning up existing pollution, and ensuring that our past environmental mistakes do not repeat in the future. In recognition of our past environmental mistakes, science has endeavored to solve our past environmental problems, as well as predict future ones. Biotechnology offers a new, innovative approach at minimizing human interference on the environment while solving a variety of environmental issues. One of the most promising aspects of applying biotechnology as a form of ecological restoration is bioremediation.

68. Devall, *Simple* 83.

69 Devall, *Simple* 84.

70 Devall, *Simple* 92.

Bioremediation is “the use of microorganisms or other living species to destroy, immobilize, or otherwise transform contaminants to less hazardous forms.”⁷¹ Bioremediation is one of the newest and most promising technologies available for restoring the natural environment damaged by human activity, yet it is inconsistent with the philosophical views of some environmental philosophies. Perhaps the environmental theory that it has the most glaring inconsistency with is deep ecology. Yet, with such a focus on ecocentrism, one might wonder why such an inconsistency exists.

The implications of deep ecology now become quite striking. Restoration of the natural environment (ecological restoration) seems to be a view that all environmentalists should agree on, since it seems in the best interest of the environment *and* ourselves to restore those ecosystems damaged by human activity to the highest extent that we are currently capable. However, the spirit of deep ecology is such that any interference by humans inflicted upon the natural environment is seen as hostile, whether meant to help or not. The reasons for this become clearer as we explore the arguments against restoration. There are five main arguments against restoration summarized by Andrew Light and originally formulated by Eric Katz, a holistic nonanthropocentrist and scholar of deep ecology. By name, the arguments are:

1. The Duplicitous Argument: I am outraged by the idea that a technologically created “nature” will be passed off as reality.
2. The Hubris Argument: The presumption that we are capable of this technological fix demonstrates the arrogance with which humanity surveys the natural world.
3. The Artifact Argument: The re-created natural environment that is the end result of a restoration project is nothing more than an artifact created for human use. Such artifacts have inherently less value.
4. The Domination Argument: The attempt to redesign, recreate and restore natural areas and objects is a radical intervention in natural processes. Although there is an obvious spectrum of possible restorations all of them involve the manipulation and

71. R.J. Lenhard, R.S. Skeen and T.M. Brouns, “*Contaminants at U.S. DOE Sites and Their Susceptibility to Bioremediation*,” in *Bioremediation: Science and Application*, SSSA Special Publication Number 43., eds. H.D. Skipper and R.F. Turco (Madison: SSSA 1995), 159.

- domination of natural areas. They create artifacts, impose anthropocentric interests, and restrict nature.
5. The Replacement Argument: Even if a restored environment is an adequate replacement for the previously existing natural environment, then humans can use, degrade, destroy and replace natural entities and habitats with no moral consequence whatsoever. The value of the original entity does not require preservation.⁷²

These arguments are quite compelling to anyone with a heartfelt concern for the natural environment. They also seem counterintuitive. Is it really the case that ecological restoration so nefarious as posited by Katz that it is masquerading under the guise of championing an important environmental concern? The dilemma these arguments present between the theory of deep ecology and practicing what seems to be in the best interest of the environment is curious indeed.

We can easily evaluate the dilemma using our case study of the Exxon Valdez Oil Spill, where we used bioremediation to restore the environment. Despite extensive efforts to contain the oil at sea, including surface burning and floating barriers, some of the oil made it to shore. Eventually, restorers used bioremediation to clean up the last vestiges of the spill, since other forms of restoration were inadequate for the task. There are two fundamental categories of bioremediation: Ex situ, which requires the removal of contaminated materials to an area offsite, and in situ, which allows the remediation to occur in the same place that it was contaminated. There are variations of both, but this is the most basic formulation of bioremediation strategies from which all other strategies emerge.

The advantages of in situ bioremediation are not lost on supporters of ecological restoration. In the case of the Valdez Oil Spill, data was collected on site and it was determined that bioremediation would be a viable way to help cleanup the shoreline. At the time, EPA guidelines did not allow for bioremediation to be used as a primary strategy, so it was only used

72. Andrew Light, “*Ecological Restoration and the Culture of Nature: A Pragmatic Perspective*,” in *Restoring Nature: Perspectives from the Social Sciences and Humanities*, eds. Paul H. Gobster and R. Bruce Hull (Washington, D.C.: Island Press 2000), 56-57.

as part of a mixed strategy for cleaning up the contaminated soil and water. It was in effect a testing of the new technology in the field at Prince William Sound, guaranteed in an agreement by the EPA and Exxon Valdez in the summer of 1989, four months after the spill occurred.⁷³ In this particular case of bioremediation, native oil-eating bacterium proved more useful to restore the site. There was an attempt at introducing a laboratory engineered “superbacteria,” but it largely proved ineffective. However, when lipophilic fertilizers (fertilizers that are repelled by water, just as oil is) are used to increase the “carbon/nitrogen/phosphorus” content of the soil, the rate of oil consumed is greatly increased.⁷⁴ By monitoring the rate of hydrocarbon consumption, adding fertilizers “accelerates the rate of oil removal by a factor of five or more.”⁷⁵ Combined with the extremely non-invasive nature of bioremediation on the natural environment, one wonders why there would be an objection to restoring an area contaminated by errant human activity.

Consider argument one, the duplicitous argument, against the backdrop of bioremediated and ecologically restored Prince William Sound. The deep ecologist is outraged that the technologically remediated environment or nature is passed off as reality. The deep ecologist’s claim runs much deeper than this simplified version. On their view, something has changed in Prince William Sound. It is not qualitatively the same, although it remains the same Prince William Sound numerically. The historical continuity of the area is disrupted due to human intervention.⁷⁶ The objection inherent in the duplicitous argument can rest upon aesthetic claims, such as arguing that nature has a beauty of its own, a beauty that is not replicable by the hand of

73. Hinton, 212.

74. Victor de Lorenzo, “Blueprint of an Oil-Eating Bacterium,” *Nature Biotechnology* 24, no. 8 (2006): 952-953.

75. James R. Bragg, Roger C. Prince, E. James Harner and Ronald M. Atlas, “Effectiveness of Bioremediation for the Exxon Valdez Oil Spill,” *Nature* 368 (1994): 413-418.

76. Donald Scherer, “The Practice of Ecological Restoration,” *Environmental Ethics* 17 (1995): 359-379.

humanity. The argument also has considerations of value; natural land, created by nature itself, has greater value than nature created by humankind. It is foolish to think that historical continuity is the only concern. Does the intrinsic value of the place rest in the historical continuity? All too often, richness and diversity are casualties when the historical continuity of a particular ecosystem is broken. The intrinsic value of the place rests in the richness and diversity then, and not the historical continuity. Historical continuity is an indicator that should raise flags when broken to warn of future problems in maintaining the richness and diversity of an area. The “new” area is less valuable than the old area because the old area was original, and often contains unique adaptations evolved by organisms in the environment. Considering that it is a goal of most environmentalists to restore the environment to some state of functionality, this argument seems counterproductive, even considering the preservation of the unique richness and diversity of a particular area. In an ecologically degraded area the historical continuity has already been broken; richness and diversity are already casualties. In the age of modern transportation, there is almost no wilderness that has retained historical continuity. It seems that argument one fails to consider ecological continuity. The ecosystem’s ecological continuity of Prince William Sound was disrupted, and could only be continued in an expedient, similar fashion with human intervention such as bioremediation.

Argument two observes the overall arrogance with which humans have historically viewed nature. Deep ecologists argue that human activities such as restoration once again demonstrate the arrogance with which we view nature. Humans have always been victims of their own arrogance, as observed so eloquently by the ancient Greeks. In Greek tragedies, there is always a tragic hero, which for us is the environmentalist. In tragedies, the hero always has a flaw, or *hamartia*. Our tragic flaw, according to the deep ecologist, is our arrogance, which the

Greeks called *hubris*. As in all Greek tragedies, our flaw has led to our own downfall. The arrogance of humanity has lead to the environmental disasters of today. However, Deep Ecology calls for a change in ecological consciousness so profound as to be equivalent to an epiphany. If people are actually learning from the mistakes made caused by their arrogance, then they may be able to reach some level of humility. It follows that using bioremediation as a form of ecological restoration is a form of penance or apology on the behalf of humanity toward the environment, as well as proof of humanity's capacity to learn from mistakes. Argument two does not take into account the possibility that plausibly, arrogance and other vices like it that cause us to make mistakes are necessary components in the process of learning, and ultimately of changing our ecological consciousness.

Argument three is one of the most hotly debated objections to ecological restoration. According to deep ecology, nature is to be valued for itself, and is of the highest value. Any form of human interference inherently damages this value. As Katz observes, on this view any restored environment is “an artifact created to meet human satisfactions and interests,” not for the sake of the environment itself.⁷⁷ I believe that this argument contains a misconception of ecological restoration. The spirit of ecological restoration is not to create, but to restore what is degraded by negative human intervention. An equivocation occurs when attributing restoration as creating another artifact. Nature already created the environment that man contaminated, such as Prince William Sound; it follows that since the ecosystem in question was already created, no being possesses the power to create it again. Furthermore, a typical artifact of human creation is a house, car, or other object of similar ontological standing. These artifacts came solely out of human thought and ingenuity, and could not occur naturally. Humans had to create it, for no

77. Eric Katz, “The Big Lie: Human Restoration of Nature,” *Research in Philosophy and Technology* 12 (1992): 231-241.

other force on Earth could arrange something so complex and minute that was not a living organism. First, the ecosystem of Prince William Sound was originally created not by humans, but by nature. Then humans contaminated it. Finally, humans restored it to the utmost of their ability, using bioremediation as one of many tools at their disposal. Nowhere in this process was anything created. Consider for a moment an old, vintage Ford Mustang. The body is falling off due to rust, and the engine does not run. Julie buys it and restores it as close to the original condition as humanly possible. Does anyone say that she created the car? No, people say that she restored it. Such is the spirit of ecological restoration.

According to argument four, ecological restoration reinforces humanity's domination of nature. However, consider what it really means to dominate someone. True dominance over a person would entail forcing them to do what is in the dominator's best interests, while the dominator does whatever is in his or her own best interests and takes every opportunity to reassert their dominance. This is the kind of idea at the center of the dominance argument. According to the deep ecologist, the anthropocentric interests of humankind are at the center of ecological restoration; as such, any act of restoration is simply the manifest domination of nature by humans. However, if this were really the case, it does not seem that anyone would be restoring the environment at all. True dominance of nature would seem to contain something akin to the following scenarios:

1. The landscape could be changed so as not to be affected by continued contamination, which is not restoration at all.
2. The area is left contaminated and technologies are produced that make the sustainability of human life on Earth unaffected by environmental contamination.

True domination of the environment does not really have any concern for the environment at all. Under true domination, the dominant person uses the dominated to their own best interests, just as the arrogant, dominating person uses the environment to their own best interests and takes

every opportunity to reassert their dominance. However, restoration inherently seems to contain environmental concerns. Otherwise, why would anyone bother to restore the environment at all? Why would anyone attempt to restore the ecosystem as close to its pre-contaminated state as possible? Anthropocentric environmentalists do exist, but even these environmentalists are still environmentalists; they are concerned about the natural environment, and share similar concerns with biocentric environmentalists on many different issues. Restoration is actually a recognition of the value existent in the natural environment and an attempt to rectify a wrongdoing. The domination argument is too simplistic, and does not take into account that there are legitimate restoration projects going on.

The fifth and final argument against restoration is the replacement argument. The concern of the replacement argument rests upon the following slippery slope: If satisfactory restorations are performed, thereby replacing the previous natural environment, then humans will be able to toy with the environment. On such a scenario, the deep ecologist's worry is that there will be no moral consequences for destroying the original environment since it is replaceable. However, as with so many slippery slopes, the argument is fallacious. The fact that the environment was restored at Prince William Sound using bioremediation shows that humans understand our interdependent relationship with nature, and such an understanding is shown to be continually increasing with the widespread media coverage of current environmental causes. Such an understanding prevents the slippery slope, because increased education and awareness of environmental issues makes it more likely that fewer past mistakes will be repeated. Humans will never be perfect, but it does not seem implausible that the severity and/or rate of environmental crises will decline as a result of education and awareness.

The arguments against restoration overall are valid points, but they rest upon a different idea of restoration. Restorationists think about restoration as ecological; if the ecological continuity of the environment is preserved to the utmost ability of humanity, then the restoration was a success. At the very least, it would be the best effort humanly possible. Katzian arguments focus upon historical continuity,⁷⁸ whereupon if the historical continuity of the ecosystem restored is not preserved then the restoration is a failure. To many, this begs some questions that one concerned with historical continuity is hard pressed to answer. Ecosystems are dynamic, not static. Historical continuity does not entail a static view of ecology. Rather, it shows that although an ecosystem is in a constant state of flux and change, it is still the same ecosystem. Should a disaster such as the oil spill at Prince William Sound be left alone simply to ensure continued historical continuity? At what point in the ecosystems history should it be restored to? On the other hand, was the historical continuity already lost the moment the ecosystem was destroyed by the oil spill? How does one destroy historical continuity? At base, historical continuity seems to be a question of identity and persistence through time, and no theory seems to have the final answer. No theory answers the question of how much of a particular environment needs destroyed before the historical continuity of the area is broken. Restoring an ecosystem, if it is to be supported by deep ecologists, seems to require restoring the ecosystem to a point in its history that allows for the greatest amount of future richness and diversity in accordance with the type of richness and diversity present before the area was degraded. Practically speaking, any environmentalist should be interested in restoring an ecosystem destroyed by such a disaster at least insofar as it seems desirable to all environmentalists to do what will preserve the continued survival of the natural world. Since the change in ecological consciousness is not immediate, it seems pragmatic to endorse restoration.

78. Scherer, 364.

In this case, deep ecology fails to fully recognize that the rightness of an action is largely system dependent, but this is a fault of many monistic theories. The persuasive power of deep ecology may in fact be hindered by a commitment to the intrinsic value of the nonhuman world.

Aside from issues with ecological restoration, deep ecology is often criticized by members of the social ecology movement. This is odd, since the two seem remarkably complimentary. It seems that environmental pragmatism has much to offer this dispute, since it has been a primary factor in keeping the two movements from working together. In the West, social ecology's primary proponent has been Murray Bookchin, while in the East Ramachandra Guha is the main constituent of the movement. Though at times deep ecology and social ecology seem to agree on many things, there are some allegedly fundamental philosophical disagreements that have kept the two philosophical movements from working together.⁷⁹

Highlighting the distinction between deep ecology and social ecology, environmental pragmatist Andrew Light calls deep ecologists ‘ontologists’ and social ecologists ‘materialists.’ According to Light, materialists “see... environmental degradation, and human suffering as a result of that degradation, as presupposed by the material conditions of capitalist economy.”⁸⁰ Conversely, ontologists “focus their critique of mainstream environmentalism on the need for more analysis of and changes in individual human consciousness with respect to the relationship between humans and the non-human natural world.”⁸¹ These will be examined in detail later, but remain important to understand the criticisms social ecology levies against deep ecology.

As environmental materialists,⁸² social ecologists disagree with the predominantly ecological environmental ontologists, notably illustrated in Bookchin's “Social Ecology Versus

79. This is a theme present in the bulk of Murray Bookchin's work.

80. Andrew Light, “Compatibilism in Political Ecology” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 162.

81. Light, “Compatibilism” 164-165.

82. This is a reference to the ontologist/materialist distinction made in Andrew Light's work, explained earlier.

Deep Ecology.” The eco-babble of deep ecology, according to Bookchin, is full of inconsistencies and inadequacies, not taking into consideration “that our ecological problems have their roots in society and social problems.”⁸³ Though the following list is not comprehensive, Bookchin criticizes deep ecology in the following ways:

1. Deep ecology reduces people from social beings to a simple species.⁸⁴
2. ...We are already living in a period of massive de-individuation. It is not deindividuation that the oppressed of the world require, but *re*individuation that will transform them into active agents in the task of remaking society.⁸⁵
3. Aids, Smallpox, and other harmful microbes are part of “all entities in the eco-sphere of the interrelated whole... equal in intrinsic worth....,” as Devall and Sessions remind us in the effluvium of eco-babble.⁸⁶

These criticisms will be looked at related to the tenets of deep ecology to assess their validity. At face value, it seems that objections 2 and 3 are a matter of debate, while objection 1 may be a result of misinterpretation.

Objection 1 is based upon the idea that people are different from animals. Bookchin argues that deep ecology, “despite all its social rhetoric, has no real sense that our ecological problems have their roots in society and in social problems.”⁸⁷ The criticism is that the social nature of humanity is ignored, and all of humanity is reduced to nothing more than another biological organism. To a deep ecologist, this sounds hopelessly anthropocentric. As an ecocentric philosophy, tenet one of deep ecology argues for the intrinsic value of all creatures. However, this equality does not necessarily prove that deep ecologists ignore the social nature of humanity. Bill Devall implicitly addresses some of these concerns in his book Simple in Means, Rich in Ends: Practicing Deep Ecology, whereupon he recognizes how “practicing deep

83. Murray Bookchin, “Social Ecology Versus Deep Ecology,” in *Environmental Ethics: Readings in Theory and Application*, 5th ed., eds. Louis and Paul Pojman (United States: Thomas, 2008), 243.

84. Bookchin, “Versus” 245.

85. Bookchin, “Versus” 246-247.

86. Bookchin, “Versus” 247.

87. Bookchin, “Versus” 243.

ecology within specific bioregions requires making moral, ethical decisions on a wide variety of relationships.”⁸⁸ Although this does not specifically mention human relationships, a charitable interpretation could easily lead one to see that “a wide variety of relationships” does not necessarily preclude human relationships. Indeed, although an ecocentric philosophy, as the decision-making agent people are always part of the moral decision making process of any relationship, even one inclusive of nature, an idea congruent with environmental pragmatism.

One might reply that simply showing that humans aren’t necessarily precluded from the relationships spoken of in deep ecology is not a very convincing reply to Bookchin’s criticism. Yet, consider the nature of deep ecology. It is against modern, technological society, because technology “alienates humans from the rest of Nature but also alienates humans from themselves and from each other.”⁸⁹ They are not alone in this assessment. Social ecologists often criticize modern technocratic society as a source of social problems. The recognition that technology is a cause of alienation, which in turn causes social problems, shows how deep ecologists also recognize that humans are social animals, not just simple biological organisms. The focus of deep ecology is on humanity’s relationship with nature, but this does not necessarily mean that it has no consideration of social problems within society as a whole. Indeed, deep ecologists believe that a return to nature will solve many of the social ills experienced today. The source of disagreement must then not be on the level Bookchin suggests, but rather on the thought process taken to get there, namely that deep ecologists criticize from the standpoint of ontologists and not Bookchin’s materialist standpoint.

Bookchin’s second objection to deep ecology states that “we are already living in a period of massive de-individuation. It is not deindividuation that the oppressed of the world

88. Devall, *Simple* 154.

89. Devall, *Deep Ecology* 48.

require, but *reindividuation* that will transform them into active agents in the task of remaking society.”⁹⁰ What Bookchin is arguing is that the biocentric egalitarianism would further deindividuate society if realized. This would result in more harm to society, since what society needs at this point is *reindividuation*. At the surface there does seem to be a degree of philosophical tension concerning biocentric egalitarianism and the preservation of the individual self. Bookchin’s concern, though not identified with a location within the text of Deep Ecology, may stem from a quote used in the text by Neil Evernden in Beyond Ecology where he argues, “to the western mind, *interrelatedness* implies a causal connectedness... But what is actually involved is a genuine *intermingling* of parts of the ecosystem. There are no discrete entities.”⁹¹ This certainly seems to espouse deindividuation and validate Bookchin’s concerns.

Let us closely examine the recent history of the individual in American society in order to gain perspective on the issue at hand. Capitalism itself extols the virtue of the individual. Capitalism thrives upon competitiveness, not cooperation. As it is based upon Social Darwinism, only the fittest capitalists survive. Only the most competitive will perform well in a capitalist society. One is supposed to “pull themselves up by their bootstraps;” if they are unable to, then perhaps they did not have what it takes to succeed. The dashing figure of the cowboy conquering the Wild West is an example of the “rugged individualism” inherent in capitalist doctrine. As we live in a capitalist society, it seems to be the case that we have actually been over individuated. Perhaps what is necessitated by this over individuation is the realizing of the self as part of the interconnected whole present in deep ecology. Alternatively, it could be the case that the dialectical holism of the social ecology movement and the realization of our role in the dialectic relationships is the answer. It does not even seem that the

90. Bookchin, “Versus” 246-247.

91. Devall, *Deep Ecology* 48.

two positions are contradictory at this point, except that social ecology focuses on a dialectical model and rejects determinisms. Even so, it is not clear that deep ecology fails to recognize this social problem as being worthy of more serious consideration.

The third objection argues that deep ecology, in order to maintain consistent biocentric egalitarianism, must admit that AIDS, Smallpox and other deadly microbes are as intrinsically worthy as humans are. My first instinct is to tell Bookchin that his point is well taken, but after further examination the objection may not be as detrimental as it appears. First, such diseases are consistent with the population control that deep ecology suggests. It could even be congruent with arguments that humanity should not interfere with these diseases when they inhabit the body; one must let nature take its course. At some points in the philosophy of deep ecology this assertion is correct, while at others it is not. As philosophers, we must consider whether such inconsistencies cause us to throw out the entire philosophy on the basis of noncontradiction, or whether minor contradictions are acceptable if they are not detrimental to the philosophy in question. A hard-line interpretation of deep ecology may not be charitable, since it does not seem that anyone would save an AIDS virus over a baby, and there is no reason to believe that deep ecologists would be any different. If the rightness of an act is system dependent, then pragmatically speaking it is alright to be anthropocentric in this case, even though it causes philosophical tension within the philosophy of deep ecology. If we are to judge deep ecology by its workability, being less misanthropic in this situation is a necessity.

Presently, people segregate themselves from nature as a whole. We build houses that are nearly air-tight, use anti-bacterial agents, and employ the use of various gadgets to ensure that we are the only organisms in our house. Only approved organisms are consciously allowed to

enter without some form of resistance.⁹² We fight disease in the name of self-preservation and the propagation of our species. It is quite possible that this alone could lead to the collapse of our civilization. It is also quite possible that it could not. Society is a construction that transcends nature; we cannot see it and point to it, yet it exists. Currently, the overall ecological consciousness of society and the majority of people would argue that deadly diseases should be eradicated. Would they say the same if they thought it would result in the downfall of civilization? Antibiotics are already creating resistant bacteria that are becoming increasingly difficult to treat. Modern medicine and technology are evolving bacteria at a much faster rate than our immune systems can adapt.

Now suppose that a change in ecological consciousness has actually occurred, however improbable one might think such an occurrence to be. According to the tenets of deep ecology, one is obligated to accept such life forms if the person agrees with the tenets. To do otherwise would be inconsistent, just as Bookchin argues. Yet, with decreased population and deglobalization, such diseases no longer pose as great a threat to humanity's survival. Normally, microorganisms are not morally considerable. Yet, they sometimes serve a vital part to the functioning of an ecosystem. According to Bookchin, humans are more than just "simple species."⁹³ In some ways, humanity has effectively removed itself from the everyday functioning of a wild ecosystem, something no other species has done. We are still part of the environment, since there is no way to escape the interrelation between the space we occupy and its relationship to our perception, but we have tried very hard to separate ourselves from the wild. AIDS, which affects few organisms, is largely removed from the majority of ecosystems. Smallpox, which is a cousin of a non-deadly bovine disease called cowpox, affects only humans.

92. This is an outline of industrial society in the case of the majority. Exceptions, such as Jainists do exist, but these are a minority.

93. Bookchin, "Versus" 245.

If I am one organism, and another is an organism that is largely removed from the ecosystem as a whole, then all things being equal (such as in biocentric egalitarianism) a loss of value is inevitable. In either case the loss of value is equal. If the loss of value is equal, it seems prudent to pick survival and kill the microorganism. This is a workable, system dependent solution.

To see what the social ecologist might do in practice, examine our case of the Exxon Valdez oil spill. A social ecologist would have to look at the cultural, political, economic, social and ecological structure of the area. In Prince William Sound where the spill occurred, we can only approximate what these social factors were like at the time. Ecologically, the beach was made of porous rock and sand, where the oil was absorbed and typical techniques used for cleaning oil spills were ineffective. Marine avian species were effected, sometimes covered in oil. Economically, much of the area is supported by fishing. To do a complete analysis would in effect be another thesis to do it justice, so it will not be fully explored here. It is enough to have a general sense of the situation for our purposes, though it has been expanded upon some here.

The social ecologist would certainly agree that the spill should be contained and then cleaned up toward the restoration of the area, given that Prince William Sound was not highly populated by humans, but was the habitat for many nonhuman species. What is more interesting to the social ecologist are deeper questions. What causes our environmental mishaps like the disaster at Prince William Sound? What can be done about these causes? Bookchin wrote in 2003 that

perhaps the most obvious of our systemic problems is uncontrollable growth. The growth of which I speak is not humanity's colonization of the planet over millennia of history. It is rather an inexorable material reality that is unique to our era: namely, that unlimited economic growth is assumed to be evidence of human progress. We have taken

this notion so much for granted over the past few generations that it is as immutably fixed in our consciousness as the sanctity of property itself.”⁹⁴

The nature of a competitive market economy calls for growth, which has, Bookchin argues, become synonymous with progress.⁹⁵ He continues, arguing that not only are the environmental woes a result of uncontrolled economic growth, but that such a picture is oversimplified; our problems have become interwoven with social structures resulting from a market economy, which also results in social norms that we have today, where producers supply the product *and* create the demand, the high price of environmentally sound products compared to their ecologically harmful counterparts,⁹⁶ and the consumer culture created by such dispositions. The solution may be “a high degree of sensitivity and reflection-attributes that are fostered by the consumption of such items as books, art works, and music-to gain an understanding of what one ultimately needs and does not need to be a truly fulfilled person,”⁹⁷ a statement sounding alarmingly like a change in ecological consciousness.⁹⁸ To the social ecologist, it is a truism that the Valdez oil spill is no longer seen as an Alaskan matter, an “episode” in the geography of pollution. Rather it is recognized as a social act that raises such “accidents” to the level of systemic problems-rooted not in consumerism, technological advance, and population growth but in an irrational system of production, an abuse of technology by a grow-or-die economy, and the demographics of poverty and wealth. Ecological dislocation cannot be separated from social dislocations.⁹⁹

94. Murray Bookchin, “Death of a Small Planet: It’s Growth That’s Killing Us,” *Institute for Social Ecology*. November 2003. [cited 5 March 2008]: available at <http://www.social-ecology.org/article.php?story=20031117103522543>.

95. Bookchin, “Death.”

96. Note that since 2003, prices on environmentally sound products have fallen, and some are even cheaper in the long run. It is still true however that organic produce, organic products, and hand crafted artifacts are all higher priced than their industrial, mass produced counterparts. These every day products are accessible to the poor, and compound the inaccessibility of environmentally sound products to the masses, in part because of the market economy according to Bookchin.

97. Bookchin, “Death.”

98. Similarities like this are articulated between David Foreman and Bookchin in *Defending the Earth: A Dialogue Between Murray Bookchin and Dave Foreman*, one of the few times a face to face talk between the two movements occurred.

99. Bookchin, “Death.”

Such dislocations prevent the change necessary to change our anti-ecological society into a society that practices a limited economy, limited population growth, and a controlled technology sector that would curb what Bookchin calls our current technocratic society.¹⁰⁰ This involves moral pluralism, since what we ought to do will change drastically depending on the situation. If social ecology is to have purposive activity in thought, this is a necessity.

Although prescriptions concerning the Exxon Valdez oil spill would change depending on location, the environmental pragmatist would in this case commend the efforts made to clean up the spill. As a previously unprecedeted case involving new technologies, dramatic effects upon the local environment and American culture, it stands as a landmark success in bioremediation and ecological restoration. Similar to the social ecologist, the environmental pragmatist would argue that the spill should have been prevented, and that measures taken after the spill toward the prevention of future incidences of like nature were inadequate. Even with all the problems, the environment was restored to the point that it was able to recover in a relatively short period of time to its pre-spill state. Social, economic, and cultural dilemmas contributing to the occurrence remain, but it may not be practical or prudent at this juncture to attempt such sweeping reforms. Suffice it to say, although the social ecologist remains unsatisfied with the situation, and the pragmatist would agree, the pragmatist would also argue that given the situation a near optimum solution was achieved.

Bioremediation is environmentally sustainable, noninvasive, and nonartificial. Pragmatically speaking, it seems like a sound practice. Without restoration, areas that are currently contaminated will take an undetermined amount of time to restore themselves, and may never be an environment close to the pre-contaminated state. Our theories should allow actions

100. Bookchin notes that Buddhism has not stopped Japan from being any less technocratic than the industrialized West.

to be taken to save the environment from the emergencies we have today. The theory of deep ecology that is at the base of the anti-restorationist vein of deep ecology is the changing of our ecological consciousness. Under deep ecology, this change is unforgiving and immediate; yet change among collective populations is rarely an event of punctuated equilibrium. Changes among the thoughts and ideas of a collective population are gradual, happening over time. If we revise the change in ecological consciousness to allow for gradual change, then restoration is not against deep ecology. If the change in ecological consciousness remains immediate, then it seems questionable whether people will become ecologically enlightened enough to avoid reinforcing Katz's arguments against restoration. The question then becomes: What kind of restoration would be acceptable to a deep ecologist who was concerned about the applicability of their philosophy in concrete situations and allowed for gradual change? The only reservation that a deep ecologist might have is that restored environment is less valuable than non-restored environment. This claim is lacking, since even a non-restored environment reached the degraded state that it is in because of human intervention. At the very least, it does not seem antithetical to deep ecology to restore those environments that are products of human intervention in some sense, leaving nearly all environments open to restoration when ecologically necessary. This is part of the roots of a pragmatic discussion of deep ecology.

Similarities between deep ecology and environmental pragmatism are many and varied. Deep ecology attempts to show that humans are not separate from the environment, but are a part of it, interconnected and inseparable. Similarly, pragmatism espouses that "mind is not apart from the world; it is a part *of* the world,"¹⁰¹ which is a foundationally consistent tenet with the claims of deep ecology. Pragmatists often generally speak of some of the problems we encounter in metaphysics as a hindrance to our philosophical progress. Ecological models used

101. Parker, 23.

by deep ecologists agree; “the venerable distinction between subject and object is thus a convenience of speech that does not bear up under metaphysical scrutiny,”¹⁰² and though the statement has grave implications, it can easily be understood in part by thinking ecologically. We are a part of the biosphere and a part of our local ecosystem, no matter how hard we try to separate ourselves from the environment. The pragmatist believes that “the environment is above all *not* something ‘out there,’ somehow separate from us, standing ready to be used up or preserved as we deem necessary,”¹⁰³ but we are part of it. It makes no sense to speak of the world outside of experience, similar to the empirical methods employed by ecologists.

In addition, deep ecology focuses on the most current ecological models, which assert that ecosystems are not static, but dynamic. Everywhere in nature change is constantly occurring, even though a system may seem stable at the macro level. Similarly, pragmatism “sees reality as process and development, and sees beings as relationally defined centers of meaning rather than single entities that simply stand alongside another in the world. It emphasizes not substantial beings, but interrelations, connectedness, transactions and entanglements constitutive of reality,”¹⁰⁴ a remarkably ecological way of thinking. Transactions and entanglements in a relational model mean that although a system can seem stable, there is no guarantee whatsoever that it is static.

Yet, with these similarities there is also much that pragmatism disagrees with in respect to deep ecology. Earlier, the ecological restoration debate was discussed within the framework of deep ecology, and I attempted to show that the Katzian stance on restoration from the standpoint of deep ecology lacked practicability, and may be adhering to theoretical concerns of deep ecology to the detriment of practicability. Pragmatism also has much to offer this debate.

102. Parker, 23.

103. Parker, 28.

104. Parker, 25.

Consider, for example, Katz's Domination argument against restoration. This argument, from the pragmatic perspective, is hopelessly confused. Pragmatism is moderately pluralistic in the ethical sense; it focuses on what to do in a certain situation, rather than to try to prescribe a theory of what one ought to do in all situations in the God of all *sunnum bonums*. Since the ethics are situated in experience, "environmental philosophy must begin with close attention to the quality of experience that arises from inhabiting various environments."¹⁰⁵ Our experience is the source of our growth as a person, as a moral agent. To dominate nature completely is essentially to "annihilate the ultimate source of our growth, and hence to annihilate ourselves."¹⁰⁶ If the spirit of restoration is to restore with good intentions a misdeed to the environment, then to say one is dominating the environment seems to have little basis. Simply put, without the environment, at our current level of technology, humans would cease to exist and all human experience would cease to exist as well. Pragmatically speaking, the domination of nature is contradictory to human flourishing.

The implications run even deeper. If environmental philosophy must attend to the experience of inhabiting various environments, then deep ecology suffers from being horribly backwards. Deep ecology requires a change in ecological consciousness, and this change in the ecological self comes from recognizing that the environment as a whole as well as the organisms within are intrinsically valuable. It is problematic that the cultivation of the ecological self requires experience that one could only appreciate on the "deep" level afforded by an already cultivated ecological consciousness. Devall and Sessions explain the process in some detail:

The deep ecology norm of self-realization goes beyond the modern Western *self* which is defined as an isolated ego... This programmed sense of the narrow self or social self dislocates us... We are thus robbed of beginning the search for our unique spiritual/biological personhood. Spiritual growth... begins when we cease to understand

105. Parker, 30.

106. Parker, 30.

or see ourselves as isolated... and begin to identify with other humans from our family and friends, to, eventually, our species. But the deep ecology sense of self requires a further maturity and growth, an identification which goes beyond humanity to include the nonhuman world.¹⁰⁷

It is as if somehow, inexplicably, we begin to recognize organisms as biocentrically equal to ourselves. Even if a gradual change in ecological consciousness were to occur, it is not clear that anyone who did not already have an appreciation of nature within them could attain the “deep” understanding of the deep ecologist. Simply put, deep ecology may suffer from circular reasoning.

There is still another dispute between pragmatism and deep ecology. Deep ecology focuses on biocentric equality, where “the basic intuition is that all organisms and entities in the ecosphere, as parts of the interrelated whole, are equal in intrinsic worth,”¹⁰⁸ a seemingly noble idea. However, as environmental pragmatist Anthony Weston notably argues, the concept of attributing intrinsic value to anything may be a fruitless endeavor. He argues that pragmatism focuses on the “*interrelatedness* of our values. The notion of fixed ends is replaced by a picture of values dynamically interdepending with other values and with beliefs... pragmatism offers... a kind of ‘ecology’ of values,”¹⁰⁹ a superior system to the old attempt at assigning intrinsic value. When questioned, an ecology of values is able to look for support from related values within the system. Things are valuable in their contexts, with it being foolish and philosophically confused to try to value them outside of their contexts. Weston aptly points out that “even [G.E.] Moore came in the end to the conclusion that nothing but an experience can be intrinsically good; his argument turns on the claim that only experiences can be worth having even if [they] exist quite

107. Devall, *Deep Ecology* 67.

108. Devall, *Deep Ecology* 67.

109. Anthony Weston, “Beyond Intrinsic Value: Pragmatism in Environmental Ethics,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 285.

alone.”¹¹⁰ Additionally, he points out that “the search for a proof of the intrinsic value of nature is almost always *post hoc*,”¹¹¹ an observation supported by the fact that environmental philosophers moved by experiencing nature come up with environmental philosophies but feel the need to justify them by attributing intrinsic value in hopelessly confused ways. Weston continues, arguing, “The important questions for pragmatism are the ones posed by specific situations, and while the answers across different situations will probably bear a strong family resemblance, they will not always be the same.”¹¹² The *post hoc* ways of many environmental philosophies are hopelessly confused because their methodology is wrong; from the pragmatic perspective, they should not ask what is right for all situations and offer justification, but should look at the situation and determine what is right in this particular circumstance due to the dynamic, unpredictable nature of ethical dilemmas.

Bioremediation satisfies the following requirements that a modified, more pragmatic deep ecology that allows for ecological restoration might have:

1. Restoration should be noninvasive whenever possible.
2. Restoration should restore the contaminated environment to a state as close as possible to the pre-contaminated status of the area.
3. The restoration process should not create other environmental problems, such as waste or disposal of byproducts.
4. The restoration process should not cause new and/or different environmental issues in the restored area.

This type of pragmatic restoration seems to have the best interests of the environment in mind, if the previous arguments against restoration were plausibly refuted and a gradual change in ecological consciousness is allowed. Environmental pragmatism doesn’t require a change in ecological consciousness, but such a change is not inconsistent with environmental pragmatism

110. G. E. Moore, “Is Goodness a Quality?” in *Philosophical Papers* (London: Allen and Unwin, 1959), 95. Qtd. in Anthony Weston, “Beyond Intrinsic Value: Pragmatism in Environmental Ethics,” in *Environmental Pragmatism*, eds. Andrew Light and Eric Katz (New York: Routledge, 1996), 288.

111. Weston, “Intrinsic” 303.

112 Weston, “Intrinsic” 302.

as a whole. *In situ* bioremediation like the type that occurred at Prince William Sound is only one type of restoration imaginable that satisfies the requirements here listed. If our theories are to be taken into consideration by environmentalists in the trenches who are deciding what to do in particular situations, then they must allow for viable options. Leaving an oil spill at Prince William Sound was not ecologically a viable option for the environment, and so we used bioremediation. Such action is not to be condemned but commended. The spill should never have occurred, but in the course of human history no one has found a way to prevent accidents, and since the onset of the industrial revolution civilization seems to have a propensity for environmentally hazardous ones. Theories that provide valuable insight such as deep ecology should be revised to allow for these considerations, if they are to be taken seriously into consideration during deliberations of policy.

It seems that pragmatism has much to offer deep ecology. The project does not necessarily throw out what is not useful to the pragmatic approach, but to reveal the weaknesses of deep ecology in such a way that it is easier to see what situations the deep ecological approach would be the most useful, and perhaps to show why it lacks the power to motivate people to the types of action it calls for. Through examining the tenets of deep ecology, it has been proposed that intrinsic value yields little fruit, and may not be the best rock with which to build philosophical foundations. If intrinsic and instrumental value are not mutually exclusive as the pragmatists claim, then deep ecology needlessly commits itself to intrinsic value, sacrificing its justifiability when judged by the pragmatic criterion of workability. The idea of intrinsic value in deep ecology even influences its practical application, as shown in the restoration debate whereupon deep ecologists are sometimes resistant to restoration projects even though it seems to be in the best interest of all, human and nonhuman. Whenever used, deep ecology reminds us

that even if we do not agree with the assignation of intrinsic value, there is something profoundly valuable to in a multiplicity of forms in the environment. We should protect these environments, and perhaps a good way to do so is to change the way that people think in a fundamental way.

CHAPTER FOUR

CONCLUSION

*After the torchlight red on sweaty faces
After the frosty silence in the gardens
After the agony in stony places
The shouting and the crying
Prison and palace and reverberation
Of thunder of spring over distant mountains
He who was living is now dead
We who were living are now dying
With a little patience*

T.S. Elliot, The Wasteland

In environmental philosophy we have created a maze of theoretical debate. It is not clear which theories are the victors, and which are the losers. Indeed, depending on who is defending the view, the victor and the loser changes debate by debate. The only clear loser in this scenario is Earth. Though many good things have come out of environmental philosophy that have had an impact on our views concerning the environment, we have failed in our collective goal because of infighting. The wasteland we have been creating for ourselves is quite intimidating. Any environmentalist can tell you about global warming, the melting of the polar ice caps, rising sea levels, water shortages and overpopulation. Environmental pragmatism might offer a way out of the wasteland, if we follow its tenets. The strength of this path out of the wasteland is that there are many divergent, parallel paths that all converge into a singular exit; the exit that allows us to leave the creation of a wasteland behind us, with a brighter future ahead.

Environmental pragmatists say that we must find value of what kinds we can in what we can, without becoming too immersed in theoretical debate over what value we *should* look for. It is enough to say that something is valuable to different people for different reasons, according the valued a certain status within a given situation. We must realize the value of experience,

while realizing that the experience itself is the source of value. Anecdotally, this is present in some of the great thinkers of American Romanticism, namely Ralph Waldo Emerson and Henry David Thoreau. Later, the thinking of these predecessors gained sympathetic minds in John Muir and Aldo Leopold, Arne Naess and Bill Devall. These thinkers found that Nature was more than the sum of its parts, and sometimes took on a spiritual aspect in their thinking, whether it was transcendentalism practiced in the Church of Nature, or a progression in the ethical sequence resultant in a change in our ecological consciousness. This is one way out of the wasteland. The Murray Bookchin's and Ramachandra Guha's of the world found a different way out of the wasteland; theirs is the path that requires the study of the situation, people, politics, culture and ecology. Although their path is complex, they do not seem to lose their way.

We must de-emphasize theoretical debate if we are to accomplish our goal. This does not mean that theoretical debate is not important. To put it in the most generic of terms, it means to unify ourselves toward the conservation and preservation of the environment in the broadest sense. Social ecology and deep ecology seem complimentary. They agree on many points, but have a long standing tradition of disagreement. Deep ecology is not as misanthropic as social ecology criticizes it for being. Deep ecology considers more of the social problems that social ecology is concerned with, but in a different, less anthropocentric way. This is not meant to be a criticism of social ecology so much as a statement of fact. To be certain, there are differences, but these seem to be a matter of what is emphasized rather than differences in what to consider. Deep ecology emphasizes what our place should be in relation to the environment. This is a result of the deep thinking associated with Naess' movement. A change in ecological consciousness adjusts the perceived place and role of a person in the world. According to deep

ecologists, this change in consciousness is impossible without realization and implementation of the tenets of deep ecology.

Social ecology emphasizes fixing our societal problems first, since our environmental problems stem from problems in our society. Without addressing these problems, we cannot competently evaluate our relationship with the environment in a productive way that would result in a greater understanding of ourselves as part of a community greater than humanity's social structure. One might wonder why Bookchin so scathingly criticizes deep ecology for taking into consideration the philosophy of a person that perceives historical political, cultural, and social trends as a warning sign to future over development, something congruent in both social and deep ecology. Andrew Light once suggested that deep ecology and social ecology might work together; Bookchin's response was that the ecofascism that he thinks is the result of deep ecology makes such an alliance impossible.¹¹³ This sounds odd, given that both have some common ancestry in Leopold's land ethic, and other similarities as well. It seems that this debate has fallen prey to the infighting between anthropocentrists and nonanthropocentrists.

Leopold's land ethic urges us to realize our place in the biotic community. We should extend moral considerability to nonhuman entities, whether it be a form of weak anthropocentrism or even extend as far biocentric egalitarianism. If we do not, we fail in our conservation goals, we fail in assisting the ethical sequence to bring about a change in consciousness. We will never realize our place in the biotic community, and will be worse off for it. Leopold opened the door for environmental philosophy, not monistically but pluralistically; there are no specific directions given as to how we are to realize Leopold's goals. A good measure of our success in this case is the workability of our theories, a concept that I think Leopold would agree with.

113. Andrew Light, *Social Ecology After Bookchin* (New York: Guilford Press, 1998), 3.

Politics are dynamic, just as the social ecologists assert. Indeed, in our everyday lives we currently see one candidate favored over another one day, only to be supplanted the next. Environmental pragmatists and social ecologists alike take “politics in general to be a constantly shifting contested terrain,”¹¹⁴ where a pragmatic solution in the politics of one year are outmoded the next. This problem is compounded for those wishing to have a universal environmental ethic, since like culture, political situations differ between cultures. This is an advantage that pragmatism and social ecology have over other theories, since when discerning what one ought to do to rectify an environmental crisis changes significantly from one situation to the next. Weston agrees, arguing that various approaches to environmental crises from the standpoint of environmental ethics is subject to variation, whereupon “the truth of these approaches are not always fundamental for purposes of environmental practice and the appropriateness of any one theory in a particular case is contingent on historical, cultural, social, and resource conditions.”¹¹⁵

With such harsh criticism of the government, society, culture, economic system and technology, one might wonder what exactly the pragmatist has to offer such a detailed discussion like the one between social ecologists and deep ecologists. The pragmatist might have different concerns. What can we change, given the circumstances? Why argue with deep ecologists when it seems that the goals of the two movements are compatible? What, if any, are the criteria that might be universally adopted? An exploration of the answers to these questions is in order to extrapolate the pragmatist position on the theory of social ecology and the concerns raised therein. Our discourse may fruitfully begin with a pragmatic assessment of the concerns of social ecology.

114. Light, “Compatibilism” 179.

115. Light, “Compatibilism” 177.

Emphasizing experience, environmental pragmatism is able to account for both societal and ecological dynamism. This emphasis allows an ethical theory or structure based upon environmental pragmatism to account for radical and moderate changes in the social and ecological reality of the biosphere. A writer of environmental pragmatism, Kelly Parker insists that such an ethic is “a process of continual mediation of conflict in an ever-changing world and lays the groundwork for a social and political philosophy that places democratic and humanitarian concerns at the center of social arrangements,”¹¹⁶ allowing for the elasticity necessary in an ethical theory that doesn't become stale and outdated through the passing of decades. A concern that one might have is that nowhere in the previous statement does anything ecological seem to be a concern; this is not the case unless one's analysis of the relationship concerning humanity and ecology places humans completely outside of the natural sphere. Environmental pragmatists do not, as a result of the emphasis on experience and no differentiation between what some are tempted to call natural and artificial experience, with natural meaning wild and artificial meaning whatever land has been touched by humans.¹¹⁷

Sandra B. Rosenthal and Rogene A. Buchholz also argue this point, stating that “to speak of an organism and environment in isolation from each other is never true to the situation, for no organism can exist in isolation from an environment, and an environment is what it is in relation to an organism.”¹¹⁸ Environmental pragmatists allow for the type of social *and* ecological considerations present in the concerns of social ecology, deep ecology, and the land ethic. Furthermore, “pragmatism... sees individuals as the source of genuine insight into what is needed, and accordingly tries to maximize participation in governing. Pragmatism is, in this

116. Parker, 25.

117. Any such claim is contentious at best, and ignorant at worst, since arguably no land has been left untouched by humans either directly or indirectly.

118. Rosenthal, 40.

respect as in others, closely allied with the ideals of the social ecology movement.”¹¹⁹ I suspect that it is more closely allied with deep ecology as well. In other words, due to the subjectivity of experience and the nature of social and ecological realities, different situations require different solutions to our environmental crises. No one solution may be found to solve all the environmental crises of the world. This is not a weakness, but a strength, if we seriously evaluate each situation on its own merits.

It seems that we have yet to learn the lessons that Leopold tried to teach those many years ago. The Earth must be taken care of regardless of who is in control of the caretaking; environmentalism is consequential in so far as what we are really worried about is the environment. If we fail badly enough, the consequence is the death of that which we tried to protect, and perhaps the death of ourselves. Nietzsche once wrote that:

God is dead. God remains dead. And we have killed him. How shall we comfort ourselves, the murderers of all murderers? What was holiest and mightiest of the world that has yet owned has bled to death under our knives: who will wipe the blood off us? What water is there for us to clean ourselves? What festivals of atonement, what sacred games shall we have to invent? Is not the greatness of this deed too great for us? Must we ourselves not become gods simply to appear worthy of it?¹²⁰

If nature is dead or dying, then we must do what we can to save it. We must ask ourselves the same questions as Nietzsche’s madman. Though it is not God that we are killing but nature, should we be pardoned for standing by and witnessing the atrocity committed? If we are, who will be there to pardon us? Should we pardon ourselves, where will we live as Gods of the Dead, except perhaps in the annals of a species responsible for its own extinction because we could not agree on a course of action, and so did little? Pragmatism offers a viable solution to our problems.

119. Parker, 31.

120. Friedrich Wilhelm Nietzsche, “The Gay Science,” in *The Nietzsche Reader*, eds. Keith Ansell-Pearson and Duncan Large (Malden: Blackwell, 2006), 125.