

CARPENTER, GEOFFREY P., Ph.D.
The Rhetoric of Advocacy in American Nature Writing. (1996)
Directed by Dr. Hephzibah Roskelly.

In this study, I examine how nature writers invest the non-human world with language in an effort to empower nature, and how, in the process, they subvert the prevailing views of humanism and scientific rationalism. I am most interested in the role of those I call "nature advocates," a group of writers who purport to represent nature's interests within the human political sphere. Some of the authors under consideration here include James Fenimore Cooper, Henry David Thoreau, Aldo Leopold, John Muir, Edward Abbey, Ursula Le Guin, Rachel Carson, and Annie Dillard, just to name a few. Most of this study is devoted towards examining how language affects the dynamics of power within the relationship between the advocate, nature, and the public. The advocate plays an intermediary role between nature (which is non-linguistic) and humanity (which defines itself as quintessential linguistic), interpreting a variety of non-linguistic "meanings" in natural phenomenon which he or she then translates into language, often with didactic overtones. This intuitive and experiential perspective of the material world is markedly different than the "objective" approach privileged within the dominant culture. The advocate rejects the strict dichotomy between objective and subjective ways of knowing, suggesting instead that knowledge is transactional. Defining nature as a speaking entity achieves a sort of epistemological re-alignment in which scientific rationalism is replaced with the notion that understanding is created as the result of the interaction--a dialogue even--between the observer and the observed, mediated through

language. Ultimately, the rhetoric of advocacy constitutes a form of praxis, where speaking for nature initiates the changes in perception necessary for realizing an ethical relationship between humanity and the rest of the biotic community.

THE RHETORIC OF ADVOCACY IN
AMERICAN NATURE WRITING

by

Geoffrey Paul Carpenter

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

(c) 1996

Greensboro
1996

TABLE OF CONTENTS

	Page
APPROVAL PAGE	
PART ONE: HISTORICAL CONTEXTS	
CHAPTER	
I. INTRODUCTION	1
II. THE INDOMITABLE WILDERNESS AND OTHER DESTRUCTIVE MYTHS	8
2.1 Nature as Threatening: The Howling Wilderness	9
2.2 Nature as Paradise: The Benevolent Provider.....	21
III. THE DEVELOPMENT OF A RHETORIC OF ADVOCACY	52
3.1 Nature as Threatened and the Role of Market Capitalism	54
3.2 The Measure of Value: Commodified Nature at Risk	67
3.3 The Price of Mastery.....	76
PART TWO: CHARACTERISTICS OF ADVOCACY	
IV. INTERPRETING THE LANGUAGE OF NATURE.....	92
4.1 Who Speaks for Wolf?: The Role of the Advocate	94
4.2 Interpreting the Language of Nature	99
V. TRANSLATING THE LANGUAGE OF NATURE.....	131
5.1 Advocacy's Double-Voiced Discourse.....	131
5.2 Representing Nature's Voice: Direct Discourse.....	134
5.3 Nature's Meaning Mediated: Indirect Discourse.....	147

VI. BROKERING POWER TO NATURE.....	163
6.1 The Rhetoric of Advocacy: Brokering Power.....	164
6.2 Nature Speaks: Re-Aligning Rhetorical Power	190
PART THREE: THE IMPLICATIONS OF ADVOCACY	
VII. ADVOCACY'S CHALLENGE TO HUMANISM	197
7.1 The Exclusive Preogatives of Humanity.....	198
7.2 Closer to Nature and Further from Language	213
7.3 The Moral Implications of Speaking for Nature	231
VIII. ADVOCACY'S CHALLENGE TO SCIENTIFIC RATIONALISM.....	246
8.1 Scientific Rationalism and the Mechanistic Model of Nature	247
8.2 Advocay's Romantic Roots	262
8.3 The Rhetoric of Advocacy: A Transactional Epistemology	285
BIBLIOGRAPHY	307

PART ONE
HISTORICAL CONTEXTS

CHAPTER I

INTRODUCTION

In *The Natural Alien*, the environmental ethicist Neil Evernden describes how scientists of the nineteenth century prepared laboratory animals for vivisection by severing their vocal cords. In experiments on dogs, cats, or other animals, scientists commonly cut the vocal cords of the animals in order to prevent them from wailing throughout the course of the painful procedure. The nineteenth-century physiologist Claude Bernard, dubbed "the father of experimental medicine," worked without anesthetics and, consequently, had to bind and debilitate his lab animals in order to conduct his experiments. He recognized that his subjects were suffering greatly, but justified his cruelty in the name of science: "A physiologist is not a man of fashion," said Bernard, "he is a man of science, absorbed by the scientific idea which he pursues: he no longer hears the cry of animals, he no longer sees the blood that flows, he sees only his ideas and perceives only organisms concealing problems which he intends to solve" (qtd. in Evernden 16).

Evernden points out that the act of unvoicing nature both affirms and denies the experimenter's humanity: "He was denying it in that he was able to cut the vocal cords and then pretend that the animal could feel no pain, that it was merely the machine Descartes had claimed it to be. But he was also affirming his humanity in that, had he not cut the cords, the desperate cries of the animal would have told him what he already knew, that it *was* a sentient, feeling being and not a machine at all" (16-7).

In addition to Evernden's observations, I would suggest that the act is uniquely human in that we, language-using animals, identify *voice* as the quintessential characteristic that invests a being with moral value. Denying the animal its voice represents a symbolic act of dissection where the physical, inanimate matter is severed from the animate, expressive being. In preparation for subduing and exploiting the animal, the scientist renders that which was animate functionally *inanimate* by disabling the primary outward expression of being: voice.

In the following study, I will examine how nature writers invest the non-human world with language in an effort to empower nature, and how, in the process, they subvert the prevailing views of humanism and scientific rationalism. My primary goal here is to describe the rhetorical strategies of those who purport to speak for nature. This approach has been adopted by a variety of writers working in different genres, literary and otherwise, from the early nineteenth century to present. Despite the diversity of this group, these writers do share a core of common goals and strategies. By outlining these shared attributes, I hope to define nature advocacy as both a unique rhetorical strategy and a transformative cultural phenomenon. While an elaborate critique of this approach is beyond the scope of this book, I will offer some initial conclusions about the implications of the rhetoric of advocacy in the course of this study.

Since the Industrial Revolution, speaking for nature has become a regular component of the nature writer's rhetorical strategy. I am most interested in the role of those I call

"nature advocates," a group of writers who purport to represent nature's interests within the human political sphere. Some of the authors under consideration here include writers like James Fenimore Cooper, Henry David Thoreau, Aldo Leopold, John Muir, Edward Abbey, Ursula Le Guin, Rachel Carson, and Annie Dillard, just to name a few. All of these nature advocates share the common goal of redefining nature as an ethical community as opposed to commodity or dead matter, and each emphasizes the role of language in effecting cultural transformations. To these ends, the advocate plays an intermediary role between nature (which is non-linguistic) and humanity (which defines itself as quintessentially linguistic). Most of this study is devoted towards discussing how language operates in the relationship between the advocate, nature, and the public.

In Chapters II and III of Part One, I will examine the historical contexts that engendered a tradition of advocacy in nature writing. Two traditions in particular, the wilderness perspective and the pastoral perspective, encouraged large-scale manipulation and destruction of the environment. The Puritans often depicted the wilderness as a hostile force, seeing it through the lens of typology as the setting for spiritual and physical trials. From this perspective, subduing the wilderness was a religious mandate, and mastery of the physical environment came to be associated with spiritual and social "progress." Similarly, the pastoral tradition gave rise to an exploitative relationship with nature, since it depicted the American wilderness as a limitless material storehouse, existing solely for the satisfaction of human needs and desires. Under the pervasive

influence of these traditions, Americans mined and manipulated the environment well into the nineteenth century with little regard for the destructive and lasting consequences for human and non-human life.

The rhetoric of advocacy developed, to a large degree, to redress the problems generated by these distorted representations of nature. In Chapter III, I describe the economic conditions which inspired many nature writers to speak for the wilderness, emphasizing in each case how the advocates are motivated by their unanimous opposition to the utilitarian perspective of nature perpetuated by market capitalism. The transition from viewing nature as indomitable to perceiving it as threatened coincides with the rise of industrialism and market capitalism. In the late eighteenth and early nineteenth centuries, America's economy began a phase of accelerated industrialization which, for the first time in American history, dramatically altered large areas of the environment. While the advocates of each age address themselves to rectifying different environmental crises, they all work to alter the underlying notions which engender and legitimate the destructive behaviors in the first place.

In Part II, I outline the basic characteristics of the rhetorical conventions of advocacy over the course of three chapters. One of the defining characteristics of advocacy is that the representative gives voice to the voiceless. Since meaning and value in human society are constructed with language, the non-human world is rendered powerless in situations where human physical and intellectual conduct are guided by language.

Beginning in the early industrial age, nature writers increasingly identified nature's muteness as powerlessness and moved to represent voiceless nature within human political sphere. These advocates often act as "translators" in that they interpret a variety of non-linguistic "meanings" in natural phenomenon which they then translate into language, often with didactic overtones. In an effort to curb environmental exploitation, the advocate relays nature's interests (as they perceive them) in the form of direct or indirect discourse. Unlike other forms of nature writing, the rhetoric of advocacy is distinctly political, and the advocates seek to transfer power to non-human nature through discourse.

Part III deals with the implications of speaking for nature, both from an ontological and epistemological perspective. In Chapter VII, I describe how the advocates seek to replace the humanistic perspective of nature with a biocentric ethic. Since apologists for humanism have long pointed to language as evidence of human superiority, advocates redefine language to include the non-linguistic expressions of nature, thereby effectively removing the rigid line which divides human from non-human, ethical being from inanimate matter. By attributing language to nature, the advocate redefines nature as a self-motivated, moral entity. The trope of speaking nature achieves a sort of cultural re-alignment, where the traditional hierarchy based on language is up-ended and humanity becomes just another member of the biotic community. From the advocates' perspective,

human conduct towards nature must be guided not by narrow self-interests, but with an appreciation for the well-being of the entire living community.

The act of speaking for nature also challenges scientific rationalism. In Chapter VIII, I describe the advocates' criticism of the mechanistic world view which, following Descartes, sees nature as an assemblage of inanimate matter. The majority of current environmental problems, argue many advocates, are the result of a tendency to see nature as so much quantifiable matter or resource, devoid of qualitative value. By privileging an "objective" approach to nature, science dismisses knowledge gained through experience and intuition, resulting in a narrowly materialistic understanding of nature. The advocate rejects the strict dichotomy between objective and subjective ways of knowing, suggesting instead that knowledge is transactional. Through their descriptions of the natural world, the advocates outline an epistemology based on the notion that understanding is created as the result of the interaction of the observer and the observed, mediated through language. There is a real world out there, they argue, but the only way we can know it is through language. As a result, our discourse about nature facilitates our understanding and influences our behavior. The fact that the nature advocates devote so much energy to defending nature in their discourse is testimony to their faith in the power of rhetoric to effect social change. Ultimately, the rhetoric of advocacy constitutes a form of praxis, where speaking for nature initiates the changes in perception necessary for realizing an ethical relationship between humanity and the rest of the biotic community.

CHAPTER II

THE INDOMITABLE WILDERNESS AND OTHER DESTRUCTIVE MYTHS

Describing nature as endangered and dependent upon human protection is a relatively recent phenomenon. In order to understand how "speaking for nature" became a regular strategy of many American writers, we must examine the traditions that contributed to its creation. In the early years of colonization, nature was frequently described as a hostile force that had to be subdued in order for a godly civilization to exist in the New World. Yet from the moment that the first explorers surveyed New England, America was also described as a second Eden. Two visions of nature, in particular, have had a great deal of influence on our perceptions of the natural world. First, in what has been called the wilderness tradition, nature is represented as an impediment to civilization and human well-being; second, in what generally passes for the pastoral tradition, nature is described as a boundless storehouse of material wealth. The two different representations of nature were often applied to the same landscapes, and, once rooted in the nation's consciousness, both tropes grew and flourished. The wilderness tradition and the pastoral tradition have encouraged massive alterations to the American frontier, and, in a variety of ways, the rhetoric of advocacy that developed in the nineteenth century was a response to the social and economic conditions that these two perspectives engendered.

2.1 Nature as Threatening: The Howling Wilderness

Among the early Puritans, nature was often perceived as a hostile adversary, a force to be avoided or conquered. Upon arriving in the New World, William Bradford surmised that he and the colonists were confronted with "a hideous and desolate wilderness, full of wild beasts and wild men." Compared to the well cultivated and domesticated landscape of England, the tangled forests and rocky shores of New England seemed frightening and alien. After surveying the lands that hemmed the little colony, Bradford laments that the weary and anxious settlers would find little comfort in their new environment:

Neither could they, as it were, go up to the top of Pisgah, to view from this wilderness a more goodly country to feed their hopes; for which way soever they turned their eyes (save upward to the heavens) they could have little solace or content in respect of any outward objects. For summer being done, all things stand upon them with a weatherbeaten face, and the whole country, full of woods and thickets, represented a wild and savage hue. If they looked behind them, there was the mighty ocean which they had passed, and was now as a main bar and gulf to separate them from all the civil parts of the world. (Bradford 62)

To Bradford and the pilgrims the unfamiliar landscape of New England, with its alien plants and animals and its harsh climate, made daily living an arduous struggle.

Certainly one reason that the wilderness elicited such fear and animosity in the minds of the early colonists is that life on the frontier was extremely difficult. In the first decade

of their existence, the Plymouth and Massachusetts Bay Colonies were beset by hardships, and the settlers struggled just to ward off starvation. The thick forests, rocky soil, and inclement weather of New England posed considerable barriers to their efforts to establish a safe haven. In the sermons and diaries of first generation Puritans, conquering the wilderness was described as a necessary condition of survival. Stories of failed settlements like the Lost Colony and accounts of Indian attacks weighed heavy on their minds, and the settlers set to work clearing the forests, cultivating the fields, and harnessing the rivers with a sense of urgency.

But the physical barrier imposed by the frontier was only part of the wilderness threat. The wilderness represented a moral impediment to the Puritans' designs for a model society and threatened to undermine the success of their spiritual mission in the New World. The Separatists who ventured to the New World did so with the intent of founding a revitalized Christian society. As the ship *Arbella* made its way to the Bay Colony, John Winthrop delivered a sermon to the Puritan colonists in which he describes the objectives for the new settlement as a covenant with God. Concerned by the political and religious turmoil in his homeland, Winthrop developed an interest in the Puritan emigration movement. He became convinced that the only hope for the purification of the Christian Church was to begin anew, to found a godly society in the wilderness of North America. Like other Puritans in England at the time, Winthrop saw exile to a strange and distant continent preferable to enduring persecution, or worse, to betraying

their religious principles. During the 1620s, Puritan leaders within the movement circulated pamphlets outlining their cause in an effort to solicit support for a sizeable Puritan migration. One such pamphlet attributed to Winthrop justifies the planned creation of a New England colony. He describes the American wilderness as a godless waste, soon become the site for a new Christian society, as pre-ordained by providence:

1). It will be a service to the Church of great consequence to carry the Gospell into those parts of the world, to helpe on the comminge of the fullnesse of the Gentiles, to raise a Bulworke against the kingdome of AnteChrist [which] the Jesuites labour to reare up in those parts.

2). All other churches of Europe are brought to desolation, & [our] sinnes, for [which] the Lord beginnes allready to frowne upon us & to cutte us short, doe threatne evill times to be comminge upon us, & whoe knowes, but that God hath provided this place to be a refuge for many whome he meanes to save. (Winthrop 1:309)

For the pious Puritans, the New World represented the opportunity to create a model civilization which would better facilitate the elevation of the soul. In his famous sermon "Model of Christian Charity," Winthrop explained to the colonists that as members of the Bay Colony they had entered into a contract with God to set up an ideal state in New England:

Thus stands the case between God and us. We are entered into a Covenant with Him for this work. We have taken out a commission. The Lord hath given us leave to draw our own articles. We have professed to enterprise these and those ends, upon these and those accounts. We have hereupon besought of Him favor and blessing. Now if the Lord shall please to hear us, and bring us in peace to the place we desire, then hath he ratified this Covenant and sealed our Commission, and will expect a strict performance of the articles contained in it; but if we shall neglect the observation of these articles which are the ends we have propounded, and, dissembling with our God, shall fall to embrace this present world and prosecute our carnal intentions, seeking great things for ourselves and our posterity, the Lord will surely break out in wrath against us; be revenged of such a (sinful) people, and make us know the price of the breach of such a Covenant. . . . For we must consider that we shall be as a City upon a hill. The eyes of the people are upon us. Soe that if we shall deal falsely with our God in this work we have undertaken, and so cause him to withdraw his present help from us, we shall be made a story and a by-word throughout the world. (Winthrop 2:18-19)

Thus, for the Puritans, the transformation of the wilderness was a divine edict. The mission they established for themselves was nothing less than the creation of a new Jerusalem in the wilderness. They were obligated, under this covenant with God, to tame

the savage wilderness--both around them and in their hearts--by whatever means, lest God be incited to "break out in wrath" against them.

Part of the reason the Puritans represented nature as hostile in their literature and sermons is that their perspective of the wilderness was based on their reliance on typology. As Sacvan Bercovitch has pointed out in his insightful study of Puritan rhetoric, *The American Jeremiad*, the Puritans usually framed their experience within the context of biblical history. They interpreted contemporary events in scriptural terms, looking for parallels between their own situation and that of God's people in the Old and New Testament. In this context, notes Bercovitch, their exile from England was compared to the exile of the Israelites from Egypt: "The newness of New England becomes both literal and eschatological, and (in what was surely the most far-reaching of these rhetorical effects) the American *wilderness* takes on the double significance of secular and sacred place. . . . it was a territory endowed with special symbolic import, like the wilderness through which the Israelites passed to the promised land" (Bercovitch 15). In his sermon "The Heart Must be Humbled," Thomas Hooker explains to his congregation that the settlers' trials in the New World were like those of the Israelites in the wilderness:

This [trial] was typified in the passage of the Children of Israel toward the Promised Land; they must come into, and go through a vast and roaring Wilderness, where they must be bruised with many pressures, humbled under many overbearing difficulties,

they were to meet withal before they could possess that good Land which abounded with prosperity, flowed with Milk and Honey. (Hooker 55)

This suffering in the wilderness was not something to be avoided, but, in light of typology, was a test to be expected and welcomed. If they were truly the new Israelites, the Puritans had to persevere in a hostile wasteland before they could pass on to Canaan. To the Puritans, the many accounts of suffering in the wilderness in the New and Old Testament pre-figured the colonists' spiritual and physical trials in America. Increase Mather wrote that suffering in the wilderness was an essential component in the transition from sin to redemption: "As the children of *Israel* went through the Red Sea, and through a wilderness before they could enter in *Canaan*, so must we wade through a Red Sea of troubles, and pass through a Wilderness of Miseries, e'er we can arrive at the heavenly *Canaan*" (I. Mather 7). Similarly, Edward Johnson constantly compared the Puritans to "The ancient Beloved of Christ, whom he of old led by the hand from Egypt to Canaan, through the great and terrible Wildernesse" (Johnson 59).

For the New England Puritans, wilderness typology served a useful theological purpose in that it allowed them to reconcile their suffering in the New World with their conviction that they were God's chosen people. The Bible is filled with accounts of God's elect suffering in the wilderness. In the Judeo-Christian scriptures, the wilderness serves as a realm of spiritual conditioning, where the faith and humility of the devout are sorely tested. Humanity's relationship with God as free-willed beings begins in the wilderness,

where, upon being cast out of Eden, Adam and Eve strive to redeem themselves after the fall. As Roderick Nash¹ has pointed out in his examination of the Christian perspective of the environment, the wilderness acquired a meaning as "a testing ground where a chosen people were purged, humbled, and made ready for the land of promise" (Nash 16). Moses, the Israelites, and John the Baptist all had to undergo trials in the wilderness that would test and ultimately reaffirm their faith. Christ's trial of temptation took place in the wilderness, and as a result of his suffering and perseverance in this evil environment he has a spiritual catharsis.

Wilderness, then, played a vital role in the typology of the Puritans, and its threatening character was already firmly established by religious tradition before the emigrants had ever set eyes on New England. If the Puritans were to be the new Israelites, then the American frontier necessarily had to serve as the barren, hostile setting for their spiritual quest. For the Puritan colonists, the New England landscape served as the parallel to the "howling wilderness" described in Deuteronomy 32:10 and elsewhere in the Bible. And in keeping with the scriptural tradition of depicting wilderness as the setting for physical and spiritual trials, the Puritans described the American landscape as

¹Throughout this section, I incorporate elements of Nash's argument from *Wilderness and the American Mind*. Nash contends that the Puritans had an adversarial relationship with the wilderness, but some may argue that the Puritans perceived the frontier as challenging, though not necessarily "evil." Nonetheless, the metaphors created by the Puritans, even when seen in the context of typology, are framed in antagonistic terms, and certainly informed the colonists' perceptions of the physical world.

adversarial, amoral, and desolate. In one of his impassioned jeremiads, Cotton Mather describes the wilderness as the agent of evil, admonishing the sinners amongst his congregation that "the *Evening Wolves*, the rabid and howling *Wolves of the Wilderness* would make . . . Havock among you, *and not leave the Bones till the morning*" (C. Mather, *Frontiers Well-Defended* 10). In the Puritan cosmology, the frontier was the physical manifestation of the adversities God's people face in their struggles for spiritual redemption. Like persecution and pilgrimage, the trial in the wilderness was a necessary component of their holy errand.

Even though the New England landscape seemed hostile and desolate, the Puritans never forgot that it was, in accordance with their own theology, offered to them by God as the site for a model Christian state, and hence it was inevitable that they would take possession of it and tame it. The Puritans believed they were chosen by heaven as "instruments of a sacred historical design" (Bercovitch 7-8). The parallels that Puritan preachers established between themselves and biblical pilgrims compelled their congregations to see the frontier as both the setting for their trials and the setting for deliverance. After enduring the hardships of the wilderness, the pilgrims were to enter into Canaan. "According to the second- and third-generation orthodoxy," notes Bercovitch, "the New World at large--not just New England but the entire continent--was destined for an errand in sacred history. Like Canaan of old, America was the child of prophesy and promise" (69). While Moses and the Israelites merely passed through their

wilderness, the Puritans felt, as Bercovitch notes, that "migration and pilgrimage entwined in the progress of New England's holy commonwealth" (15). Thus, the creation and "progress" of their theocracy was part of the Puritan pilgrimage. The Puritans believed themselves to be the culmination of a cyclical history of holy errands. From this perspective, nature becomes much more than a site for trials as it was for the Israelites; it was also perceived as the site of deliverance, their promised inheritance. Consequently, their errand entailed not only surviving the trials of the wilderness, but making it ready for the Lord.

The Puritans believed they, like the Israelites, would be delivered from the wilderness, but not by escaping it but by transforming it themselves. As Bercovitch observes, the typological parallels "develop into a sweeping prophetic comparison--of the errand then, at the birth of Christianity, with the errand now, to bring history itself to an end. In this sense," says Bercovitch, "*errand* means *progress*. It denotes the church's gradual conquest of Satan's wilderness world for Christ" (Bercovitch 12). As God's chosen people, the Puritans would please Him by subduing both the external and internal wilderness--by transforming a wasteland into a new Jerusalem and by cultivating Christian souls among the sinful.

Conquering the wilderness for God was primarily a battle fought on spiritual terrain. The physical environment mattered not nearly so much as the religious environment. If New England were to be the model Christian society, all aspects of life had to be

conducive to the individual's spiritual salvation. The wilderness represented a region outside of God's domain, a spiritual wasteland where temptation and corruption lie in wait for unsuspecting pilgrims. The Puritan leaders frequently expressed fear that uncontrolled, chaotic, sensual nature might present an irresistible lure for the highly disciplined community. Coming from a culture where social, political, and religious life were highly prescribed and regimented, the Puritans worried that the appeal of total liberty, made possible by the vast stretches of "uncivilized" wilderness, would entice the colonists to throw off their cultural constraints and give expression to a more primitive, animal impulses.

For many of the colonial leaders, the Indians seemed to be a physical incarnation of the corrupting influence of untamed nature. Since wilderness was thought to be antithetical to civility, living close to nature was seen as reverting to a more animal existence. Many of the clergy feared that contact with nature would undermine the religious resolve of the congregation. To a people indoctrinated in wilderness typology, it seemed as if the Indians had incorporated the wilderness into themselves and, as a result, had forfeited their basic humanity. The struggle against the Indians was in many ways a struggle against the perceived dehumanizing aspects of the wilderness. According to Gary B. Nash, author of "The Image of the Indian in the Southern Colonial Mind," Europeans primarily depicted Indians as "savage, hostile, beastlike men, whose proximity in appearance and behavior was closer to the animal kingdom than to the kingdom of

men" (G. Nash 56). For example, in "Gods Controversy with New England," Michael Wigglesworth suggests that the Indians were the enemies of God who inhabited a hellish wilderness. The New World was "a waste and howling wilderness, / Where none inhabited / But hellish fiends, and brutish men / That Devils worshipped" (83-4). In the Indians, colonists saw what they believed they might become if they gave in to the vast, lawless, alien frontier that enveloped them; hence, the conquest of the Indians was, at least in part, just one aspect of the overall struggle to subdue those aspects of themselves which the Puritans feared the most.²

More immediately, however, the wilderness perspective had significant political, military, and economic applications. Englishmen, born of a culture which stressed the importance of property rights, felt a need to justify their possession of Indian lands. One way was to deny the humanity of the Indians. Writing in the early 1600s, Robert Gray, a promoter of colonization, argued that the Indians had no viable claim to the land because they were not fully human: "Although the Lord hath given the earth to children of men . . . the greater part of it [is] possessed & wrongfully usurped by wild beasts, and unreasonable creatures, or by brutish savages, which by reason of their godless ignorance & blasphemous idolatrie, are worse than those beasts which are of most wilde & savage nature" (qtd. in G. Nash 64). By equating the Indians with the wilderness, the colonists

²The connection between language and civility and savagery and silence is examined in further detail in Chapter VI.

were able to classify them as existing outside the bounds of both divine and human law. Consequently, in many instances they expressed no more reservations in evicting native people from their lands than they would about clearing trees for planting.

According to typology, the Indians were the hostile Canaanites and the Puritans the vanquishing heroes. Since Puritan doctrine identified the New World as God's new promised land, many found the presence of pagan Indians intolerable. Bercovitch argues that this conviction that the colonists were inheriting territory bequeathed to them by God justified, in their minds, the acquisition of lands by force. The frontier "separated them from the Indian 'outer darkness'--but they could hardly accept the restriction as permanent. America was God's Country, after all, and they were on a redemptive errand for mankind. . . . It became, in short, not a dividing line but a summons to territorial expansion" (Bercovitch 163-4).

The wilderness perspective amounted to a cultural imperative to subdue and dominate the natural world. This adversarial perspective inevitably influenced other spheres of life. As religious fervor waned and the colonists developed a more mercantile perspective of the natural world, the belief that mastery over nature would benefit the spirit legitimated capitalistic desires to exploit the natural world for resources. Furthermore, the motivation to subdue and control a hostile wilderness validated scientific manipulation of nature for human ends, and it influenced the way that scientists and naturalists interpreted natural phenomenon. Under the influence of this cosmology, conquest and domination are seen

as part of God's plan or the universal order, and every battle won against the environment was touted as a victory for humanity.

2.2 Nature as Paradise: The Benevolent Provider

While the Puritans were busy battling to subdue the wilderness for their own spiritual well-being, there were others lately arrived in the colonies who sought to master nature for material gains. As the wilderness tradition was taking hold in New England, another view of nature, pastoralism, inspired many to plunder the riches of the New World. The clash between these two perspectives is most evident in the controversies that developed between Thomas Morton and the Bay Colony. Morton, a merchant adventurer and contemporary of Bradford and Winthrop, established an outpost of lax living at neighboring Mount Wollaston, or "Merry Mount." An Anglican, Morton was not bound by the same stringent religious restrictions as his devout neighbors, and he cavorted with the Indians, made merry round the Maypole, and generally courted all sorts of worldly pleasures. Unlike the Puritans who viewed the wilderness as a hostile adversary, Thomas Morton was guided by a pastoral perspective of nature and envisioned the New World as a limitless, benevolent provider. While the two views of nature are motivated by entirely different sets of assumptions, the consequences for nature are the same, since both call for the domination and exploitation of nature.

As Morton's biographer John Canup put it, the Puritans saw Morton as "a creature of cloven hoof" who had transplanted Old World paganism into their Christian sanctuary. Morton seemed to confirm the Puritans' suspicion that, given the chance, Christians could be tempted by the wilderness to embrace a more primitive, sensual, animal existence. Untamed, untrammelled nature offered the possibility of living without religious and civil law. Theologians of the day argued that without the checks of civilized society, human nature would be guided by the lowest of passions. Morton's band,--living as they did without the moderating effects of church and state, tucked away in the woods, communing regularly with the "savages"--had essentially immersed themselves in nature while the Puritans had done all in their power to exclude any taint of wildness from their nascent society. Eventually, Morton's Separatist neighbors could take no more, and for his habitual drinking, merrymaking, and fraternizing, Morton was set in the stocks, his home was burned to the ground, and he was sent back to England.

The Puritan's banishment of Morton stemmed from a list of complaints about his lifestyle, his religious orientation (or lack thereof), his relations with the Indians, and his personal conduct in general. But it becomes evident upon reading both parties' accounts of the conflict that their incommensurable views of nature contributed greatly to their mutual antagonism. To Morton, the vast stretches of untamed wilderness were not threatening, but liberating; nature was not hostile and desolate, but bountiful and nurturing. While Bradford, Winthrop, and Mather were determined to vanquish the

wilderness in order to ensure the colonists' spiritual salvation, Morton was intent on plundering nature for his own worldly gain. In contrast to the Puritan jeremiads which characterized the wilderness as brutal and barren, Morton's account of the colonies, *The New English Canaan*, waxes poetic over the beauty and plenty of the New World:

The more I looked, the more I liked it. And when I had more seriously considered of the bewty of the place, with all her faire indowments, I did not thinke that in all the knowne world it could be paralel'd, for so many goodly groves of trees, dainty fine round rising hillucks, delicate faire large plaines, sweete cristall fountaines, and cleare running streames that twine in fine meanders through the meads, making so sweete a murmering noise . . . [that] runne downe to Neptunes Court. Millions of Turtledoves . . . sate pecking of the full ripe pleasant grapes that supported by the lusty trees, whose fruitful loade did cause the armes to bend: [among] which here and there dispersed, you might see Lillies and of the Daphnean-tree: which made the Land to mee seeme paradise: for in mine eie t'was Natures Masterpeece; Her cheifest Magazine of all where lives her store: if this Land be not rich, then is the whole world poore. (Morton 179-80)

Morton's imagery of the New World reveals the unmistakable influence of the centuries-old traditions of the pastoral. The conventions of classical pastoralism pervade much of Morton's descriptions of his new environment. In *New English Canaan*, rural life is idealized, and Morton creates a highly stylized and symbolic representation of

nature--one that is often quite different from the harsh conditions of life in New England. In keeping with the classical tradition of the pastoral, he describes nature as a realm of escape from the complex world of society. Rural life in the colonies is idealized, and the Indians fit conveniently into the standard role of good-natured shepherds who live a more carefree and innocent existence in nature. As in traditional pastorals, nature in *New English Canaan* is both a harbor for and source of innocence and health. And like the pastorals of antiquity, the New World pastoral serves as a handy forum for Morton to criticize the corruption, sterility, and artifice of society--most notably Puritan society.

But the American pastoral differs from the classical tradition in that it developed a unique economic emphasis. In Morton's early American pastoral, and in much of the nature-as-paradise literature that followed, nature is primarily depicted as a material storehouse, a natural larder stocked for the sole purpose of serving humanity. The trope of limitless bounty figures much more prominently in American pastoral than in traditional pastoral verse. At times nature is described as a wild, pre-lapsarian Eden where wild grapes bend the boughs of trees, almost to the point of breaking; in other instances nature is described as a cultivated human garden where the fertile soil and agreeable climate conspire to yield crops of enormous size and delectable flavors. In both cases, nature is described as supplying, almost willingly, an endless store of the material goods for human well-being and profit.

The nature advocates' task of reversing this tendency to commodify nature entails challenging a view of nature which is deeply ingrained in economic, political, and literary institutions. The tradition of depicting the American wilderness as a boundless garden predates Morton. Undoubtedly, historical accounts of the New World as an earthly paradise from the likes of Captain John Smith, John Josselyn, William Wood and other explorers influenced Morton's own hyperbolic description of the landscape. Exploring the Carolinas for Walter Raleigh, Captains Barlowe and Amadas reported that it was a land of "wonderful plenty," with native crops "sweet, fruitful and wholesome" (qtd. in Kolodny 10). In his popular survey, *Description of New England*, John Smith describes how the rich fisheries of North America could provide the foundation for a stable economy in the colonies and Wood describes the New England forests as an "Indian Orchard." Morton was familiar with the writings of Smith, Wood, and Josselyn, and his survey of the land seems heavily influenced by their Arcadian imagery and their glowing descriptions of untapped natural wealth.

The economic emphasis that developed in the American pastoral was influenced by the tendency on the part of early merchant adventurers to frame their solicitations for financial support within the conventions of the pastoral. Morton relies on stock pastoral tropes to convey his enthusiasm for North America's material bounty with the ultimate goal of inspiring investors to back his ventures. Like the promotional tracts of Smith and Wood, Morton's book, *New English Canaan*, is virtually an inventory of New England's

natural resources. In his survey of New England, Morton describes in explicit detail every plant or animal he finds that may serve some monetary or practical end. He looks at the trees and sees "pipe-staves," "oares," "hoopes," and "masts." He looks at the birds and sees "fethers," "quiles," and "down." He looks at the animals and sees "skinnes," "good flesh," and "hids" that promise to yield profits beyond compare. Morton's survey of New England amounts to a commercial inventory of natural resources:

Oakes are there of two sorts, white and redd; excellent tyber for the building both of houses and shipping. . . . They are excellent for pipe-staves, [which] at the Canary Ilands are a prime commodity. (182)

Cypres . . . is sweeter then Cedar, and, (as it is in Garrets herbal) a more bewtifull tree; it is of all other, to my minde, most bewtifull, and cannot be denied to passe for a commodity. (185)

Of the Swanne, the flesh is not much desired by the inhabitants, but the skinnes may be accompted a commodity fitt for divers uses, both for fethers and quiles. (189)

The skinnes [of the beaver] are the best merchantable commodity that can be found, to cause money to be brought in to the land. (205)

From this perspective, full appreciation of nature *demande*d consumption. The earth's "fruitfull wombe," writes Morton in a poem, "Not being enjoy'd, is like a glorious tombe" (114). For Morton, the material wealth of New England was untapped profit, waiting to

be converted "by art and industry" into commodities. The landscape was deemed valuable not for its aesthetic beauty, but for its physical bounty. The ultimate end of the natural world is only fully recognized in transformation or consumption that satiates human desire.

Morton did not separate aesthetic delight from utility. In "New Canaans Genius," his tribute to Lake Erocoise (current-day Lake Champlain), Morton invokes the pastoral convention of the catalogue of attributes, but with an economic emphasis. A stream was beautiful if it yielded "multitudes of fish"; the woods were lovely because they were a repository for "rich fures"; and the American frontier was a paradise because it was stocked with so many "usefull Beasts." The poem, which amounts to the climactic sales pitch at the end of Book II, is what Morton calls a "Catalogue of commodities" of the richest fur trading region in the New World. Written in the pastoral mode, the ode exemplifies this impulse to wed natural beauty to economic utility that developed within the nature-as-paradise tradition:

New Canaans Genius: Epilogus

Thou that art by Fates degree,
 Or Providence, ordain'd to see
 Natures wonder, her rich store

Ne'-r discovered before,
 Th' admired Lake of Erocoise
 And fertile Borders, now rejoice.
 See what multitudes of fish
 She presents to fitt thy dish.
 If rich fures thou dost adore,
 And Beaver Fleeces store, 10
 See the Lake where they abound,
 And what pleasures els are found.
 There chast Leda, free from fire,
 Does enjoy her hearts desire;
 Mongst the flowry bancks at ease 15
 Live the sporting Najades,
 Bigg lim'd Druides, whose browes
 Bewtified with greenebowes.
 See the Nimphes, how they doe make
 Fine Meanders from the Lake, 20
 Twining in and out, as they
 Through the pleasant groves make way,
 Weaving by the shady trees

Curious Anastomases,	
Where the harmeles Turtles breede,	25
And such usefull Beasts doe feede	
As no Traveller can tell	27
Els where how to paralell.	28
Colcos golden Fleece reject;	29
This deserveth best respect.	30
In sweete Peans let thy voyce,	
Sing the praise of Erocoise,	
Peans to advaunce her name,	
New Canaans everlasting fame.	

Like much of the praise lavished on the New World at this time, this pastoral tribute is dominated by the fantasy of easy prosperity. By establishing a connection between the mythic golden fleece of Colcos and the abundant beaver pelts, Morton suggests that the fur trade will reward the investor with limitless riches. Furthermore, says the poet, the unparalleled value of Erocoise furs renders all comparison pointless, and thus even the most touted symbol of wealth, the golden fleece of antiquity, has been supplanted by the bounty of the New World. In lines 29-30, Morton rejects the "Colcos golden Fleece" for possessing inferior value to beaver pelts and advises his readers to turn their attention towards the greater riches of edenic Erocoise. In this new American pastoral paradise

"deserveth best respect" because it had utility, because it was consumable and marketable.³

Informed by the fantasy of limitless bounty, the pastoral ideal elaborated by Morton, Smith, Wood, Josselyn and others established a myth of abundance that would become the dominant trope of American pastoralism. This version of the garden ideal continued to influence writers throughout the eighteenth and nineteenth centuries. Writing on the character of American pastoralism, Henry Nash Smith observes that "The master symbol of the garden embraced a cluster of metaphors expressing fecundity, growth, increase, and blissful labor in the earth" (Nash 123). The myth of limitless abundance has had a great impact on America's political, economic, and cultural destiny. In many ways, it generated a sense of optimism in the prospect of the young nation and it moved many to high praise of nature's benevolence. More detrimental, however, were the consequences of the metaphor for the environment. When people were guided by this ideal, their conduct resulted in some of the most extensive exploitation of the American wilderness. In regions of the West, it was this wishful notion of abundance, observes Leo Marx, that "activated stubborn settlers who struggled for years to raise crops in what was literally a desert" (142). Encouraged by the persistent assurances of nature's bounty, many Americans set out to extract the treasures promised them in paradisaical images of America.

³By comparison, the European pastoral emphasized the value of rustic life as an escape from the rigors of labor and the artifice of civilization.

With its assurances of a benevolent and nurturing nature, the pastoral tradition compelled Americans to feel entitled--even encouraged--to wrest whatever they desired from the wilderness.

In the eighteenth century, when the colonies had firmly established an agrarian culture, the pastoral was adapted more frequently to describe paradise as a cultivated garden. Nature was seen as latent natural wealth which only needed cultivation to reach its greatest potential. In exchange for a little pleasant labor, nature rewarded humanity both materially and morally. Humanity's proper place in the garden was to act the role of cultivator. Paradise, in this case, is not an idealized wild garden that is ready for people to inhabit; instead, paradise was to be hewn out of the raw materials provided by the wilderness. In Morton's untamed Arcadia, mankind was a pampered guest and passive recipient of nature's bounty. For the agrarian pastoralist, on the other hand, the dream of abundance and happiness required human participation in the wilderness, since, in the rural imagination, the notion of harmony suggested a mutually beneficial relationship between humanity and nature.

The French-born American frontiersman, Hector St. John de Crevecoeur, initiated an agrarian literary tradition that was infused with pastoral idealism. Crevecoeur did not believe that nature was best left in a tangled, primitive state. Instead, part of the idyllic quality of nature was that it welcomed human transformations. Nature was a system devised by the Creator for the benefit of humanity, and pleasant labor in the garden

yielded moral instruction as well as bread. Crèvecoeur "admires improved nature," notes Marx, "a landscape that is a made thing, a fusion of work and spontaneous process" (112). In the agrarian tradition, the American wilderness, while beautiful and self-sufficient in its pristine state, is improved through human intervention.

Crèvecoeur describes how the farmer exerts an organizing and elevating influence on his environment. While nature was designed for man, he had to insert himself within that order. Thus, the creation of paradise required some vigilance. The natural community in which the farmer lives is subject to his governance, and his role as steward demands that he foster a harmonious relationship with nature. In this case, human well-being is the ultimate indicator of harmony, and what benefits the farmer is seen to benefit the whole natural community. Thus, for Crèvecoeur, the farmer did not merely subsist in nature, he collaborated with it to realize the dream of abundance, both for humanity and "brute creation." Crèvecoeur sought first and foremost to provide his family with all the necessities of life, but he delighted in being able to give a portion of his harvest to his non-human neighbors. However, if those creatures exhibited what he considered greed or violence, or if they threatened to diminish the farmer's portion, Crèvecoeur felt compelled to oppose them.

In *Sketches of Eighteenth Century America*, Crèvecoeur describes in detail the "Enemies of the Farmer" and lists their various offenses. The blackbird is depicted as a flying parasite of "the greatest degree of temerity." In an effort to eradicate the birds, the

local farmers set out poisoned grain, attacked them with guns, and even established a bounty system to encourage their destruction. He concedes that their "depredations proceeded from extreme hunger, not from premeditated malice"; nevertheless, he says they "make great havoc" in the corn fields, and, thus, they had to be exterminated.

Similarly, in *Letters*, he writes of an incident where his soft-heartedness for king-birds leads him to watch passively as they devour swarms of bees. But he realizes that his fondness for the wild freedom of these acrobatic birds must not blind him to his responsibility to put the land to productive ends. The value of cultivation supersedes the value of wilderness, and Crevecoeur opts to destroy that which threatens his efforts to bring the land into productivity: "Thus divided by two interested motives, I have long resisted the desire I had to kill them until last year, when I thought they increased too much, and by my indulgence had been carried too far" (*Letters* 26). As he watches the hungry birds eat the bees, he realizes that these insects provide him a valuable service in pollination, while the birds cannot contribute nearly as much to his well-being. "This made me resolve to kill as many as I could," reports Crevecoeur, and upon shooting a king-bird, he opens its craw and releases those bees he could save (*Letters* 26).

Within the agrarian tradition of the pastoral, humanity is perceived as the good gardener, the kind steward, or the prudent manager. From reading Crevecoeur's accounts of rural life, one is led to conclude that he feared that without human intervention nature would fall into chaos. A swarm of locusts, an infestation of cutworm, or an increase of

rats in the granary is interpreted as an evidence that wild nature, left to its own, will go out of balance. All that is wanted to restore nature to a more idyllic state is management and manipulation by humanity. The farmer corrected the various imperfections in unruly nature in putting it under cultivation. In Crèvecoeur's scheme of things, nature welcomes the order that humanity imposes, and, under the wise management of a sensitive steward, the control of predators, the cultivation of productive species, and the transformation of the environment benefit all the members of nature's community. Crèvecoeur even suggests that nature conspires to serve the interests of humanity. "If Nature has formed mice," reasons Crèvecoeur, "she has created also the fox and the owl. They both prey on these. Were it not for their kind assistance, the mice would drive us out of our farms" (*Sketches* 65).

Crèvecoeur argued, as did many of his day, that nature exercised a moral influence on those who live in close contact to the land. In his *Letters from an American Farmer*, Crèvecoeur presents farm life as an idyllic existence, testifying frequently that the relationship ennobles both nature and the farmer. Those who live the rural life, says Crèvecoeur, are free from the distorting influences of artificial culture, and can observe, without prejudice, the moral machinery of the universe. In many instances in his *Letters*, he describes how nature exerts a moral influence on him and, in general, on the American public. "[The] sagacity of those animals which have long been tenants of my farm,"

admits Crèvecoeur, "astonish me." The hen will nurture her chicks, says an admiring Crèvecoeur, "with a vigilance which speaks shame to many women" (54).

Yet left to its own devices, nature could reproduce all the evils of human society. The passions of cattle, he claims, are "exactly the same as among men," and he finds himself correcting the barnyard tyrants who, like their human counterparts, "always strive to encroach on their neighbors; unsatisfied with their portions" (Crèvecoeur, *Letters* 25). In addition to taking lessons from the natural world, Crèvecoeur felt compelled to exercise some sort of moral influence over his domain. On checking one of his honey trees, he found that ants had been exploiting the hive for honey. "This intrusion," says Crèvecoeur, "gave me a bad opinion of the vigour and vigilance of the [ants]." To "deliver [the bees] from the rapacity of an enemy which they could not repel," Crèvecoeur resolves himself to do battle against the ants, thereby setting nature aright by imposing a degree of balance and justice upon disorder:

Next day, accompanied by my little boy, I brought a kettle, kindled a fire, boiled some water, and scalded the whole host as it ascended and descended. I did not leave one stirring. The lad asked me a great many questions respecting what I was doing, and the answers I made him afforded me the means of conveying to his mind the first moral ideas I had yet given him. On my way home I composed a little fable on the subject, which I made him learn by heart. God grant that this trifling incident may serve as the basis for a future moral education. (*Sketches* 64)

This pastoral penchant for mastery finds expression in a number of American institutions designed to impose order on the wilderness. Agencies like the Bureau of Land Management, the Department of Agriculture, and the Bureau of Reclamation have sought to tidy up and make productive unruly nature, usually with grave consequences.

Crevecoeur's enthusiasm for rural life in America came at a time when Europe was becoming increasingly urbanized. In many ways, the pastoral mode was created as a reaction against the pressures of urbanization and mechanization. For Crevecoeur, and other eighteenth-century pastoralists, argues Marx, agrarian culture was seen as an ideal "middle state" between savagery and artificial civility. Like Crevecoeur, Thomas Jefferson romanticized the notion of an agrarian culture. Jefferson held that the ideal society would be an Arcadian republic, where farmers constituted America's nobility. Throughout his writings, the shepherds of the Virgilian tradition are replaced with images of contented yeomen farmers whose devotion to agriculture stems from their commitment to "rural virtue." Ultimately, he dreamed of a nation where all Americans could be self-sufficient landowners. He goes so far in *Notes on Virginia* to argue that, to avoid becoming industrialized, the nation would be better off exporting raw materials to Europe and importing manufactured goods.

But Jefferson remained realistic about the inevitable industrialization of the country, and he claimed that his nation of independent noble husbandmen was "theory only." Upon comparing the nation's economy to those of Europe, he believed that American

society needed to incorporate manufacturing into its economic base. During his presidency and throughout his political life, he felt pressured to abandon the agrarian dream and embrace the new wave of industrialism. While Jefferson expressed grave reservations about implementing a mills system in the United States like that in Britain, he was fascinated with machines and wrote very favorably of the steam engines he saw in the factories near London. His optimism regarding technology represented the mood of the nation, and, on the eve of American industrialism, many observers believed that the machine would finally make the pastoral dream of unlimited plenty attainable.

At first glance, the metaphor of the bountiful garden appears to be incongruent with the emerging industrial culture of the nineteenth century. But the economic aesthetic of American pastoralism made it easily amenable to industrialization. In America, the pastoral tradition has frequently been used to *encourage* industry, and, when Americans' faith in "progress" was at a fever pitch, it also supplied the rhetorical means by which to incorporate industrialism into the garden. Working under the assumption that nature existed to provide humanity with unlimited material resources, pastoralist saw the machine as just an extension of the pastoral design to achieve material abundance. From this perspective, the Arcadian shepherd who plucks the fruit from wild vines and the yeoman farmer who harnesses the land for profit are no different than the industrialist who smelts ore for making rails. Since nature, in this pastoral ethic, is a system that

exists for the sole benefit of humanity, the land will only achieve its highest potential when it has met the material demands of all people.

As the mechanical world increasingly infiltrated the pastoral, the distinction between the realms of city and country begin to break down. The machine finds a place within the cosmology of the garden, and the result, argues Leo Marx, is the development of an "industrial version of the pastoral design" (32). In his landmark study of American pastoralism, *Machine in the Garden*, Marx argues that, in this tradition, machine and garden are reconciled, generating a new "industrialized version of the pastoral." By extending the definition of nature to include both the physical world and all the laws that guide phenomenon in that world, the machine is co-opted into the pastoral metaphor as the manifestation of the laws of nature. Writers in the early 19th century touted the machine as the embodiment of humanity's most noble aspirations. "Armed with this new power," observes Marx, "mankind is now able, for the first time, to realize the dream of abundance" (192).

Of American writers working within the pastoral tradition, Emerson and Whitman "pay the most direct, wholehearted tribute to this industrialized version of the pastoral ideal" (Marx 222). In the imagination of early industrial America, the machine was seen as a force for liberation. By discovering and harnessing the laws of nature, humanity was, in the opinion of the most optimistic, fulfilling its greatest promise. In the minds of many nineteenth-century Americans, the machine had the potential for instituting a new

democratic society where prosperity and luxury were accessible to all. Human intellectual and technological prowess developed cheaper and easier ways to extract wealth from the environment, and transportation and communication technologies promised to unite people from the most distant corners of the nation. To the industrial pastoralist, the machine represented humanity's ability to overcome physical limitations by utilizing the higher intellectual powers. As material prosperity increased as the result of human manipulations of the environment, it seemed that nature was rewarding humanity for finally exerting a level of ingenuity and perseverance worthy of its potential. As the industrial became integrated into the pastoral, it seemed that the second Eden in America would only be realized if humanity maximized its ability to force nature to meet ever-expanding human needs.

Emerson adopts what Marx calls the "rhetoric of the technological sublime." In his case, the machine is seen as a natural outgrowth of nature itself, since the human inventive genius is an expression of the same universal will that informs all nature. In *Nature*, Emerson applauds the ingenuity and creativity that grants humanity control over the physical world:

[Man] no longer waits for favoring gales, but by means of steam, he realizes the fable of Aeolus's bag, and carries the two and thirty winds in the boiler of his boat. To diminish friction, he paves the road with iron bars, and, mounting a coach with a ship-load of men, animals, and merchandise behind him, he darts through the country,

from town to town, like an eagle or a swallow through the air. By the aggregate of these aids, how is the face of the world changed, from the era of Noah to that of Napoleon! (13)

The application of technology to nature is described as a most natural behavior for humankind, and, for the most part, such transformations are welcomed by nature. Like other pastoralist, Emerson imagines a benevolent universe--one that consciously assists in facilitating human spiritual evolution: "Nature, in its ministry, is not only the material, but is also the process and the result. All the parts incessantly work into each other's hands for the profit of man" (*Nature* 13). More than providing for physical necessities, argues Emerson, nature exists to fulfill human spiritual needs: "But nature has a higher end, in the production of new individuals, than security, namely, ascension, or, the passage of the soul into higher forms" ("The Poet" 24).

Emerson is confident that "the advance of science will be followed by a comparable improvement in political morality" (Marx 230). The machine represents the strength and vitality of human Reason. Whereas Whitman would later describe the machine as human artifice integrated into nature, Emerson describes the machine as an extension of nature. Technologies like railroads and factories, says Emerson, "fall within the great Order not less than the beehive or the spider's geometrical web. Nature adopts them very fast into her vital circles, and the gliding train of cars she loves like her own" ("The Poet" 19). The person of true vision will not see nature and machine as incommensurable, but will

understand that one's tools necessarily grow out of oneself. The poet, Emerson's "man of vision," "reattaches things to nature and the Whole,--re-attaching even artificial things and violations of nature, to nature, by a deeper insight-disposes very easily of the most disagreeable facts ("The Poet" 18-19).

Part of the reason that industrialism was so easily integrated into the pastoral scheme is that nature was perceived as incorruptible. Emerson felt that contact with America's wilderness would have a "sanative and Americanizing influence, which promises to disclose new virtues for ages to come" (*Nature* 370).⁴ While Emerson thought that cities were oppressive to the soul, that did not dissuade him from embracing machines, which he believed could, in a rural setting, improve spiritual and material conditions in the nation. Furthermore, his transcendentalism allowed him to see machines and human artifice as merely an extension or expression of nature, since humanity and nature, in his view, were in essence one and the same.

⁴From the early days of American manufacturing, enthusiasts of industrialism also believed that a vast, vital American wilderness would have a corrective effect on the machines that had brought misery to the crowded dirty mill towns of England. Jefferson rejected the idea that America would reproduce the oppressive factory system that existed in Europe. "Once the machine is removed from the dark, crowded, grimy cities of Europe," notes Marx, "[Jefferson] assumes that it will blend harmoniously into the open countryside of his native land" (150). Other early proponents of manufacturing, like Tench Coxe, argued that America would purify the manufacturing system of some of its more oppressive elements. Coxe, like many of his generation, felt, that "Just as the American sun is a more potent bleaching agent, so the entire social climate of the new Republic will cleanse the factory system of its unfortunate feudal residues" (Marx 158).

Whitman also integrates the locomotive, icon of the industrial age, into his American garden. In "Passage to India," his tribute to American technological ingenuity, Whitman exclaims, "I hear the locomotive rushing and roaring . . . through the grandest scenery in the world (51-52)." In this industrialized version of the pastoral, America still possess the most sublime and elevating natural beauty, but that beauty is improved by the introduction of nobler human artifice. The most impressive aspects of American wilderness--"plentiful larkspur and wild onion," "noble Elk," "clear waters," and "majestic pine"--are viewed by Whitman from "continual trains of cars" that thread their way from coast to coast. By "surmounting every barrier," the train does not displace nature, but brings humanity in direct contact with it. The machine becomes the mediator between humanity and nature, a tangible intersection of internal mind and external world.

For Whitman, nineteenth-century America stood on the verge of great achievements, and progress held the promise that humanity would overcome all physical impediments to well-being, and in the course, the nation would attain a higher spiritual state. In this vision of paradise, the machine was seen as an outgrowth of the human spirit and intellect, and, as such, it is capable of perfecting humanity. The new high priests of this industrialized paradise, "engineers," "architects," and "machinists," would labor "not for trade or transportation only,/ But in God's name, and for thy sake O soul" (39-40). In "Passage to India," Whitman expresses the general sentiment of the day that the industrial

age could in fact be a harbinger of humanity's complete dominion over nature. The building of the Suez Canal, the linking of the nation by rail, and the laying of the Atlantic cable bolstered Whitman's faith that America was a worthy nation for the site of a second Golden Age. Nature, from this perspective, welcomes human control, since "God's purpose from the first" is for "The earth to be spann'd," "the oceans to be cross'd," and "The lands to be wedded together" (30-35).

In mastering the natural world, humanity accomplishes the ultimate purpose of the earth--the satisfaction of our "never-happy hearts" and the alleviation of all human yearning that began with the fall. Since being evicted from paradise, humanity has been separated from nature, and has served a sentence of suffering and strife. Human mastery of nature amounts to a re-unification. Within Whitman's pastoralism, the physical manipulation of the globe by "the great captains and engineers" is testimony to our intellectual and spiritual progress. The great human accomplishments of the century suggested to Whitman that America had progressed to such a point that it could give rise to a visionary or poet, "The true son of God," who would make the final strides towards human redemption. At that point, where humanity realizes its highest potential, nature will come under complete control of humanity: "All these separations and gaps shall be taken up and hook'd and link'd together" (109). Within this myth, our ultimate reward for mastery will be our re-admittance to Eden. With the perfection of the human soul, "Nature and Man," explains Whitman, "shall be disjoin'd and diffused no more" (114).

Earlier in the poem, Whitman contends that nature has some "inscrutable purpose, some prophetic hidden intention" for humanity (86). He imagines that nature acts as a facilitator for human progress and suggests that, as we come closer to achieving our fullest potential, the universe metes out rewards. Proof of human progress is registered by nature's complicity in human designs, and our successes in mastering the physical world are interpreted as examples of encouragement offered up by a benevolent universe. In light of advances he witnessed in technology, Whitman pronounces that human perfectibility is within our grasp, and exclaims that we stand perched on the precipice of just such a time in human history:

Year at whose wide-flung door I sing!

Year of the purpose accomplish'd!

.

I see O year in you the vast terraqueous globe given and giving all (116-20).

Under this pastoral ethic, the more the globe is made to give, the more it appears to condone the course of human moral and (by implication) industrial progress. In this way, industrialism was a self-fulfilling prophecy, where each new mode of extraction and every new conquest of nature was seen as evidence that the world was willingly submitting to its subjugation.

Since the pastoral metaphor encouraged people's faith in the resilience and fecundity of nature, few saw industrialism as capable of generating permanent environmental

change. Guided by this distorted vision of a boundless frontier, and inspired by the elevated status conferred upon the machine by industrial pastoralists, manufacturers and speculators yoked pastoralism to capitalism to create a powerful new destructive metaphor: "natural wealth." Extracting and harnessing the nation's "resources" was validated under pastoralism as a patriotic service of sorts, where the industrialists, above all, were the agents who could transform the nation into a new Arcadia. "Harmony" with nature was increasingly defined as an exploitative relationship in which nature was primarily an inanimate treasure trove of latent wealth that rewarded humanity for aggressive plundering. By integrating industrialism and the pastoral, these writers sanctioned--often unwittingly--the wholesale commodification and degradation of the environment.

The power of machinery to extract greater yields from the land suggested to many a masochistic relationship in which nature responded positively to force. Whereas Morton's wild garden and Crèvecoeur's cultivated farm acted as passive provider, nature in industrialized pastoralism seemed to demand its own subjugation. The machine's introduction into the garden intensified the degree to which humanity exercised power in the relationship. As enthusiasm for the exploitative force of industrialism mounted, nature was increasingly described as fawning servant. Theodore Parker, a member of the Transcendentalists Club, brims with pride at the deference with which nature yields to humanity: "At the voice of Genius, the river consents to turn his wheel, and weave and

spin for the antipodes" (Parker 253). He goes even further to suggest that nature itself offers up the machine to mankind, to expedite its own manipulation: "The mine sends him iron Vassals, to toil in cold and heat. Fire and Water embrace at his bidding, and a new servant is born, which will fetch and carry at his command" (Parker 253). The integration of industrialism and pastoralism ultimately legitimated humanity's exercise of aggressive force against nature, and encouraged a perspective of nature as compliant servant.

Historically, the pastoral depiction of nature as submissive provider has been closely associated with representations of nature as female. In Carolyn Merchant's study of shifting perspectives of nature, she describes the gender politics implicit in the pastoral: "It depended on a masculine perception of nature as a mother and bride whose primary function was to comfort, nurture, and provide for the well-being of the male. In pastoral imagery, both nature and women are subordinate and essentially passive" (*Death of Nature* 9). But when human demands on the environment exceeded the land's carrying capacity, the decades-old promises of paradise only aggravated Americans' sense of deprivation, and nature became the target of their anger and frustration. More often than not, life in the New World was a matter of survival rather than plenty. Settlers and investors lured to America by the promise of the abundance of "mother nature" felt betrayed by a world that had violated its obligation to nurture and provide for mankind.

As ecofeminist Annette Kolodny points out in her book *The Lay of the Land*, the tradition of symbolizing nature as feminine in a patriarchal society resulted not only in a descriptive link, but also a "structuring link" in which the repressive relationship that exists between man and woman is mirrored and reproduced in the relationship between humanity and nature. In the grips of a pervasive, misogynistic pastoral tradition, Americans feel entitled to reap (rape) nature's "maternal" bounty and to impregnate the "virgin" landscape with monuments to masculine virility. The pastoral is in many ways an eroticized male fantasy, where the land is seen as mother, mistress, or virgin. The consequence of extending the repression of women to a "feminine" landscape is that humanity is now faced with an environmental crisis of global proportions, a crisis engendered by the metaphorical representations of nature that encourage its subjugation.

Kolodny argues that our understanding of the world is facilitated through language. Expanding on models of cognitive development offered by theorists like Jean Piaget, Kolodny speculates that the human propensity for "symbol-making or image-producing" is necessary for making sense of reality. These symbols we use to comprehend the world tend to color our subsequent experiences. By extension, says Kolodny, our perceptions, influenced by our metaphors, come to shape behavior: "Students of language, following [Benjamin L.] Whorf and Edward Sapir," offers Kolodny, "are coming more and more to assert the intimate interaction between language, perception, and action" (148). The implication of feminizing the landscape, says Kolodny, is that we have strived "master the

beautiful and bountiful femininity of the new continent," and, when pastoral fantasies have been frustrated, Americans have responded with anger and violence towards the land. The dream of abundance, as envisioned in the American pastoral, was doomed to disappointment from the beginning. The insistence that a feminized, passive nature existed for the sole purpose to satiate man's desires led Americans to feel entitled to extract whatever resources deemed necessary with no regard to long term consequences.

The metaphors we have created to help us symbolize experience ultimately influence our perception of reality. Kolodny concludes that our symbols affect the way we act towards the symbolized, and, accordingly, we must take responsibility for the metaphors we have created. But Kolodny cautions against reductive social constructionism. Just because we can reject the destructive patterns of symbolization, we "should not . . . assume . . . that we have only to abandon [the pastoral vocabulary] altogether in order to solve our ecological problems" (147). The work of changing habits, language, and perception is a long and arduous project, especially, she notes, in the case of the image of nurturing nature because it seems to resonate with human psychological experiences and needs. Nonetheless, Kolodny suggests that one way to begin reforming our destructive relationship with nature is to replace outworn and destructive perceptual frameworks with positive, productive metaphors: "the more we understand how we use language and, conversely, how (in some sense) language uses us, the possibility becomes that we may actually begin to choose more beneficial patterns for labeling and experiencing that

mysterious realm of phenomena outside ourselves and, hopefully, with that, better our chances of survival amid phenomena that, after all, we know only through the intercession of our brain's encodings" (147).

Both of the major cultural representations of nature, as adversary and as paradise, have resulted in widespread degradation of the environment. Both have contributed to a culture of exploitation by compelling humanity to gain a mastery of the natural world. This impulse towards dominion, when paired with the belief that human strivings have little or no effect on the overall order of the physical universe, has imbued the wilderness and the pastoral tropes with very destructive implications. The end result of both traditions is that the most horrendous human exploitation of nature is legitimated and Americans feel entitled to radically alter all life on the planet.

Recognizing that our conduct is, to a great extent, guided by the language we use, advocates seek to rectify the problems created by destructive representations of nature by re-shaping our discourse. One of the ways that advocates accomplish this task is by offering an alternative perspective to the pastoral and wilderness ethic, one that sees nature not as indomitable, but as fragile and threatened. In the rhetoric of advocacy, nature is depicted as a living, moral community which includes humanity. This new vocabulary, much like an innovation in art or science, broadens our conceptual horizons, making it possible to understand and experience nature in new ways. Unlike the pastoral or wilderness tropes, the image of the nature-human community allows the advocate to

examine human conduct holistically, *as it affects nature*, rather than how it serves humanity. To counter the destructive views exacerbated by the wilderness and pastoral traditions, concerned writers, naturalists, and scientists developed a rhetoric of advocacy both to protect the physical integrity of America's wilderness and to create an alternative, productive pattern of symbolization.

CHAPTER III

THE DEVELOPMENT OF A RHETORIC OF ADVOCACY

A conservationist ethic did not appear with any regularity in American culture until the early nineteenth century when a growing number of advocates began to question the world views promulgated by the wilderness and pastoral traditions. As science, industry, and agriculture increasingly extended their powers over the environment, it became more and more difficult to perceive humanity as the persecuted martyr of a hostile frontier or the pampered dependent of a nurturing garden. Instead, evidence of rapid environmental degradation at the turn of the century caused a growing number of naturalists and writers to speculate that humanity was fast becoming nature's oppressor. The environmental destruction witnessed by Americans at the turn of the century served as physical testimony to humanity's increasing mastery over nature. Over the years, the myth of an indomitable nature was revised one ecological disaster at a time, engendering a new perspective of the wilderness as fragile and finite.

The development of a rhetoric of advocacy in America coincided with the rise of market capitalism, as concerned naturalists and writers bore witness to the devastating effects of industrialization and profiteering. The wilderness and pastoral traditions contributed equally to the commercial exploitation of the environment at the turn of the century. For example, many nineteenth-century merchants and politicians described the forests as a harbor for savage beasts and savage peoples, and they welcomed exploitative timber companies as agents of civilization. Similarly, the agrarian version of the pastoral

encouraged farmers and woodlot owners to "improve" their land, and, in an effort to realize the dream of plenty and prosperity, Americans shifted from subsistence farming to intensive cultivation methods that exhausted the soils. Both the wilderness and pastoral traditions shared the assumption that humanity was entitled to manipulate nature to meet its needs, a view that served to legitimate (though for different reasons) market capitalism's exploitation of the environment. Reacting against the notion that nature was valuable only when tamed and commodified, nature advocates--from the earliest days of the movement to present--have sought to revise the utilitarian approach to nature with a variety of ethical perspectives. A sampling of innovative and prominent nature writers from the nineteenth and twentieth centuries reveals that the rhetoric of advocacy developed in large part to remedy the destructive world views promoted by market capitalism.

In this chapter, I will examine the economic, political, and historical factors which contributed to the development of a rhetoric of advocacy in America. In particular, I will discuss the perspectives of nature that inspired four of the most prolific and influential nature writers to act as representatives for the wilderness. Henry David Thoreau, John Muir, Aldo Leopold, and Rachel Carson all shared the conviction that society's destructive metaphors exercised a transformative force on the environment, and each, in his or her own way, worked to subvert those images by redefining nature as an animate, moral community.

3.1 Nature as Threatened and the Role of Market Capitalism

In almost any age or culture, the wanton destruction of nature tends to illicit condemnation from thoughtful observers. In the early history of the republic, wasteful agricultural and lumbering practices motivated a few farsighted individuals to speak in defense of the wilderness. Noah Webster complained that heavy logging in New England was responsible for more intense flooding: "When land iz covered with trees and leevs, it retains the water, but when it iz cleered, the water runs off suddenly into the large streems. It is for this reason that freshe[t]s in rivers have become larger, more frequent, sudden and destructiv, than they were formerly" (*Essays and Fugitiv Writings* 371-2). For James Madison, the country's "injudicious and excessive destruction of timber and firewood" threatened to lead to serious shortages and hardships for affected communities (qtd. in Merchant, *Ecological Revolutions* 227). Despite these and other scattered voices of protest, the majority who wrote about nature felt little cause for concern because the American wilderness seemed so vast and immutable.

In the late eighteenth and early nineteenth centuries, New England's economy began a phase of accelerated industrialization which, for the first time in American history, dramatically altered large areas of the environment. In her historical survey of New England ecology, *Ecological Revolutions*, Carolyn Merchant writes that a commercial boom in the 1790s resulted in a shift from subsistence farming to intensive agriculture.

The expanded markets in Europe and at home encouraged exploitative methods as farmers geared production toward profit: "The choice of increasing production for the market sometimes entailed labor-intensive fertilizing, or plowing and harvesting additional tillage" (*Ecological Revolutions* 189). This transition from farming for "family reproduction" to production for profit marked "a turning point in American consciousness" says Merchant, where an organic, animate model of nature gave way to an increasingly mechanistic world view. The shift to commercial agriculture ultimately accelerated soil depletion, monoculture, and deforestation throughout New England.

By the turn of the century, it was becoming obvious to many observers that humanity did indeed possess the power to permanently alter the face of the earth. On many of the major waterways in New England, mills with their weirs and holding ponds had stagnated once free flowing streams and seriously depleted the stocks of migratory fish like alewife, shad, and Atlantic salmon. Careless slash and burn clearing techniques had resulted in extensive forest fires, some scorching tens of thousands of acres at a time. In 1820s and 30s, the forests of Maine suffered numerous severe burns, and the smoke from some of these fires could be seen several states away. In their descriptions of the Great Fire of 1825, "Contemporary writers told lurid tales of flames that roared like thunder and could be heard a dozen miles, and of smoke so thick that Penobscot ferrymen were obliged to use compasses" (Wood 73). Throughout New England, destructive logging practices had left streambanks denuded, shorelines flooded, and river channels choked and polluted.

The destructive consequences of the transition to a market economy are most dramatically illustrated by deforestation rates in nineteenth-century New England. As lumbering practices shifted from woodlot subsistence to clear cutting, lumbering became a corporate interest and new technologies and exploitative production methods resulted in unprecedented ecological destruction. Clearing for agriculture and logging increased sharply in the early 1800s, denuding much of New England of its native forests by mid-century: "From a uniform high or 95 percent at the time of European settlement, Connecticut's forests had been reduced to 30 percent by 1850, Rhode Island's to 52 percent, Massachusetts' to 40 percent, Vermont's to 45 percent, New Hampshire's to 50 percent, and Maine's to 74 percent" (Merchant, *Ecological Revolutions* 225). Due to the wasteful practices of loggers and farmers over the century, Maine's forests were cut so extensively that by 1900 an estimated 75% of the original pine had been removed (Coolidge 136).

Shocked by the rapid degradation of their beloved American wilderness, nature writers began to act as representatives or advocates for nature with greater and greater frequency in the nineteenth century, and by the 1850s this role had become an established (though fringe) tradition in American literature. One theme that resonates through the rhetoric of most all advocates is the condemnation of the utilitarian⁵ approach to nature

⁵By utilitarian I mean the view that values objects or actions because they are useful, not the doctrine of promoting the greatest good for the greatest number.

promulgated by market capitalism. American economic discourse is pervaded with the wilderness and pastoral perspectives, each serving--in their own ways--to encourage and justify the commodification of nature. With its emphasis on material abundance, industrialism was easily amenable to the pastoral idiom, and corporate plunderers often described their actions as merely the efficient "harvest" of nature's bounty. With much the same results, the view of nature as hostile adversary was used to justify political and economic programs designed to transform and conquer the frontier for commerce. Early in the nation's history, the imperative to subdue the wilderness for spiritual or social progress was fused with the accumulation of property and the expansion of trade.

Rejecting the capitalistic notion that the regress of the wilderness represented human progress, advocates conceived of nature as a complex community of life which included humanity. For early advocates like Thoreau, the dominant image of nature as a boundless paradise or indomitable adversary was contradicted by the bulk of his personal experience which suggested that the wilderness was increasingly threatened by human economic activities. Thoreau was one of the first observers to record the environmental impact of market capitalism on agriculture and logging.⁶ He had noted on his Maine excursions

⁶A few decades before Thoreau started advocating for nature, writers like James Fenimore Cooper and Thomas Cole (discussed at length in Part II) condemned what they perceived to be the moral deficiencies of the materialistic approach to nature. In *The Prairie* (1825), Cooper's nature advocate, Natty Bumppo, criticizes the avarice of the settlers he meets on the plains and suggests that the barren prairies may bear the scars of

that destructive cutting and fires had left much of the north woods a scarred patchwork. The environmental abuses of the mid-nineteenth century so disturbed Thoreau that he commented extensively about the devastating ecological impact of unchecked profiteering. In the *Maine Woods*, "Walking," *Walden*, and other writings the observant naturalist records with dismay the reckless and irreverent attitude that humanity displays towards nature.

On August 31, 1846, Thoreau left his temporary home on Walden Pond for Bangor, Maine on a trek to Mount Ktaadn, the highest peak in the state. His journey would take him to the booming mill towns of Bangor and Old Town, up the Penobscot River, and through some of Maine's most productive timber country. Over the next eleven years, Thoreau would make two more extended trips to Maine, exploring the waterways, woods, and lakes of the northern frontier. His journals from his three trips to Maine confirm that logging had made a severe impact on the environmental integrity of Maine forests and rivers. Thoreau reports in "Ktaadn" that as early as 1837 "there were . . . two hundred and fifty sawmills on the Penobscot and its tributaries above Bangor, the greater part in this immediate neighborhood, and they sawed two hundred millions of feet of boards annually" (*Maine Woods* 5). Along all his travel routes in Maine, Thoreau saw signs of civilization, and only the remote and rocky slopes of Ktaadn appeared free of human

ancient human exploitation. Similarly, in the 1820s Cole published a variety of poems condemning the thoughtless destruction of the American forests.

presence. Interspersed with Thoreau's philosophical musings and his accounts of the events of each trip are detailed observations of the destructive land clearing techniques being practiced by both loggers and farmers.⁷

In *The Maine Woods*, Thoreau records images from a world in transition, giving us insight into a pivotal period in America's environmental history when anthropogenic changes were beginning to occur on such a large scale that they dramatically and

⁷Thoreau was well qualified to testify about the detrimental impacts of industry on the forest ecology. A keen observer of American flora and fauna and a studied naturalist, Thoreau attended Harvard from 1833 to 1837, taking course in natural history and reading travel narratives on a variety of locations including Canada, Columbia, Mexico, and current-day Vietnam. He was an esteemed naturalist among his peers and in 1859 was appointed to Harvard's Committee for the Examination in Natural History. As early as 1847, Thoreau submitted natural history specimens to Louis Agassiz, a renowned Swiss scholar on glaciers and ichthyology who had been working on classifying North American fauna. Before all his journeys, Thoreau would prepare himself thoroughly by reading geographical descriptions or historical accounts of the prospective sites. Other than loggers, few whites had reason to explore Maine's interior, so relatively little had been written about the region's environment. But in the course of preparing for several trips, Thoreau managed to examine much of the information then available, drawing from the earliest exploration narratives to the most contemporary government reports. He was familiar with John Josselyn's descriptions of seventeenth-century Maine and compared his predecessor's impressions of the region to his own. He also reviewed reports from the more recent expeditions to the area and made regular use of Charles Jackson's 1838 geological survey. In addition to reading extensively about the geography of Maine, we may infer from the texts Thoreau selected that the subject of logging was of special interest to him. In preparing his travel journals, Thoreau fully acquainted himself with the writings of the lumberjack clergyman John S. Springer, whose book *Forest Life and Forest Trees* (1851) is one of the earliest and most comprehensive accounts of logging practices. He also referred to the works of the French naturalist F. A. Michaux for his descriptions of logging practices on the Kennebec. In addition to drawing from the experiences of these noted explorers, Thoreau was familiar with the works of an early

permanently altered what then seemed to be a limitless and indomitable American wilderness. After making three treks through the northern woods over eleven years, Thoreau was able to record in detail the destructive impact of corporate logging methods then used, as well as document the changes brought about by these practices over successive years. Thoreau was motivated to speak for nature, like so many other advocates, as a result of his realization, over the course of many years, that the utilitarian perspective of nature promoted by market capitalism was responsible for significant environmental degradation.

In each of Thoreau's essays, he describes how the lumbermen harnessed the waterways to their advantage and discusses how these modifications adversely affected the surrounding environment. In accounts of all three of his treks, Thoreau makes frequent mention of the dam systems erected by the logging companies. While the manipulation of stream flows greatly benefitted Maine loggers, it dramatically altered the shoreline habitat of lakes and streams, often killing thousands of acres of trees. Thoreau records the impact of damming in each of his *Maine Woods* essays, but describes the conditions most extensively in "The Allegash and East Branch." On his 1857 trip, Thoreau and his companions traveled across Moosehead Lake, down the West Branch, onto Chesuncook Lake and Chamberlain Lake, then returning down the East Branch. All

conservationist, Alexander von Humboldt, a scientist and forester who wrote about the deleterious impacts of deforestation.

along this route, Thoreau recounts with dismay the destruction lumbermen have done to the forests by raising water levels on nearly every lake on the waterway:

They have thus dammed all the larger lakes, raising their broad surfaces many feet; Moosehead for instance, some 40 miles long, with its steamer on it; thus turning the forces of Nature against herself, that they might float their spoils out of the country. They rapidly run out of these immense forests all the finer and more accessible pine timber, and then leave the bears to watch the decaying dams. Not clearing nor cultivating the land, nor making roads, nor building houses, but leaving it a wilderness, as they found it. In many parts only these dams remain, like deserted beaver dams. Think how much land they have flowed without asking Nature's leave!
(Maine Woods 252-53)

The extensive damage done to the forest watershed was due in large part to the shift from woodlot harvesting to commercial production. As opposed to pre-boom days when private landowners cut selectively from dispersed and relatively small plots, logging companies purchased the rights to extensive tracts of forests and conducted intensive cutting practices to maximize profits. According to a botanical survey conducted in 1861, just four years after Thoreau's last expedition to the interior, relatively all the merchantable timber had been culled from the Penobscot river bed as far north as Medway, where the East and West Branch meet (Wood 29). In many areas throughout New England, loggers shaved stream beds clear of trees, sending the timber downstream

to the mills, and then moved on to the next tributary. In the spring, the flow of logs down the waterways could be prodigious. In his history on the Maine lumber industry, Richard G. Wood notes that during the 1849 log drive "a newspaper reported that the *Moosehead* [a steamer] had towed a raft of logs twenty-one acres in extent" (98).

Reacting to the expanding timber trade of the early nineteenth century, logging companies scrambled to satisfy the market demand for specific species of trees. The intense competition between various logging companies caused them to pursue the various trees of preference with a fervor which nearly eradicated some species from certain areas. As is the nature of the capitalist market, when certain commodities become scarce, their value increases, creating even greater incentives for their exploitation. From colonial times to the turn of the century, the white pine was the tree of choice. During his travels, Thoreau constantly searched for the white pine, but found that loggers had been so successful in their pursuit of these old giants that the trees had become quite scarce in the Maine woods. While traveling the carry from Umbazookskus Lake to Mud Pond in 1857, Thoreau comments on how the new market forces had dramatically altered the composition of species within the Maine woods:

Here commences what was called twenty years ago, the best timber land in the State.

This very spot was described as "covered with the greatest abundance of pine," but now this appeared to me, comparatively, an uncommon tree there,--and yet you did

not see where any more could have stood, amid the dense growth of cedar, fir, &c.

(*Maine Woods* 212-13)

Prized for its even grain, its straight and relatively knot-free trunk, the pine was scouted out and selectively cut from New England's forests for almost two centuries. Travelling along the lower reaches of West Branch in 1846, Thoreau was disappointed to find that few pines in the region had been spared the ax. "The woods hereabouts abounded in beech and yellow birch, . . . also spruce, cedar, fir and hemlock; but we saw only the stumps of the white pine here, some of them of great size, these having been already culled out, being the only tree much sought after, even as low down as this" (*Maine Woods* 22). As successive waves of cutters entered the woods over the years, they became less and less particular about their cutting habits, and white pines became ever more scarce.

The rhetoric of advocacy which Thoreau employs throughout is motivated in part by the desire to curb the destructive lumbering and farming practices he witnessed on his trips, but it also functions to create the conditions necessary for such a critique. When nature is perceived as object or commodity, there is little reason to extend it any moral consideration. Our ability to pass judgment upon human conduct towards the environment depends upon our willingness to believe that nature possesses value as a living entity. Thus, throughout the *Maine Woods*, Thoreau consistently supplants the dominant economic vocabulary with metaphysical language, redefining the extensive

"harvest" of the trees as an offense against an animate world possessed of "spirit." The prodigious flow of logs from the forests, to the streams, to the mills troubled Thoreau, and he comments almost prophetically that, as the result of profiteering, the very existence of the forests seemed to be in jeopardy of complete annihilation:

Think how stood the white pine on the shore of Chesuncook, its branches souging with the four winds, and every individual needle trembling in the sunlight--think how it stands with it now--sold, perchance, to the New England Friction Match Company! . . . The mission of men there seems to be, like so many busy demons, to drive the forest all out of the country. (*Maine Woods* 5)

Here Thoreau reverses the utilitarian perspective of nature, presenting living nature as valuable and forest products as comparatively worthless. The naturalist draws a sharp contrast between the majesty of the living trees, "souging with the four winds," and the insignificant and transitory gains--represented appropriately by the match stick--which loggers made by cutting them down. Thoreau's shock at the deforestation stems from his alternative value system, which measures worth as an expression of being or spirit as opposed to mere utility. "Every creature is better alive than dead," asserts Thoreau, "men and moose and pine trees, and he who understands it aright will rather preserve its life than destroy it" (*Maine Woods* 135). Right action, implies the naturalist, proceeds from right thinking. Thoreau realizes that in order to change habits, he must change people's understanding.

In an effort to evoke in his audience greater concern for nature, Thoreau anthropomorphized the forest, depicting it as the suffering and persecuted victim of human avarice. After considering the cumulative damage he had witnessed as a result of lumbering, Thoreau describes the loggers as a plague upon the forest:

The wilderness experiences a sudden rise of all her streams and lakes, she feels 10000 vermin gnawing at the base of her noblest trees. Many combining drag them off jarring over the roots of the survivors, and tumble them into the nearest stream, till, the fairest having fallen, they scamper off to ransack some new wilderness, and all is still again. It is as when a migrating army of mice girdle a forest of pines. (*Maine Woods* 252)

Thoreau's anthropomorphized vision of nature as innocent victim is at once antithesis and antidote to the wilderness tradition. Thoreau revises the view of nature as savage and indomitable by depicting the trees as quite defenseless and passive in the face of a brutal human onslaught. Based on what he had witnessed in the Maine woods, Thoreau contends that the timber industry had developed the power to "drive the forest all out of the country." Within this didactic narrative, Thoreau reverses traditional assumptions of the oppressed and oppressor, representing the lumbermen as an "army" of "vermin" and the forests as a noble race struggling for survival.

In *The Maine Woods*, Thoreau counters the destructive force of capitalism's world view with alternative explanatory metaphors. The strategies Thoreau employs suggests

that the naturalist developed his rhetoric of advocacy in an effort to dispel the myth that the wilderness was largely unaffected by human manipulations. One of the necessary conditions for the act of representation is the recognition of a disparity of power. In any mediated relationship, the advocate is motivated to speak for those represented (children, nature, a defendant, migrant workers, battered women, etc.) because they are under some form of persecution and lack the means to adequately defend themselves. In Thoreau's case, historical evidence and his own writings suggest that the decision to speak for nature derived from his realization that humanity possessed both the physical means to dramatically alter the environment and the will to do so. Through language, Thoreau worked to lay the foundation for an ecological conscience that might guide human conduct in the natural world.

3.2 The Measure of Value: Commodified Nature at Risk

A decade after Thoreau's last trip to the Maine woods, John Muir set out on foot on a "botanical" expedition that took him from Indianapolis, Indiana to Cedar Keys, Florida. Muir's *A Thousand Mile Walk* is taken from his journal which he kept over the course of his journey. More than a catalogue of flora and fauna, Muir's journal includes observations on the troubling state of humanity's relationship to the natural world. While his contemporaries were increasingly caught up in the excitement of America's rapid push to take its place among the industrialized nations of the world, Muir viewed economic

and technological "progress" with skepticism. Like Thoreau, Muir felt that the capitalistic view of nature as simply the raw material of wealth neglected to account for the non-economic, qualitative value of nature as an expression of life.

In his account of his travels through the South, Muir worries that, under the impression that nature was a boundless cornucopia of raw materials, society had begun to do irreparable damage to the wilderness. In a remote area of Tennessee, Muir met up with what he describes as backwards people whose poverty was exacerbated by their exploitative relationship with the land. One member of an impoverished family observed that "Our fathers came into these valleys, got the riches of them, and skimmed the cream of the soil. The worn-out ground won't yield no roastin' ears now" (*Thousand Mile Walk* 38). Yet the poor man accepts without question his ancestors' assumption that nature existed to be exploited, and he suggests optimistically that more wealth may yet be wrestled from the land: "But the Lord foresaw this state of affairs, and prepared something else for us. And what is it? Why, He meant us to bust open these copper mines and gold mines, so that we may have money to buy the corn that we cannot raise" (*Thousand Mile Walk* 38).

For Muir, the purely utilitarian approach to nature common in his day struck him as blatantly irreverent and short-sighted. Rejecting the notion that the wilderness was humanity's storehouse, Muir viewed nature holistically as an animate community: "They tell us that plants are perishable, soulless creatures, that only man is immortal, etc.; but

this, I think, is something that we know very nearly nothing about. Anyhow, this palm was indescribably impressive and told me grander things than I ever got from human priest" (*Thousand Mile Walk* 92). Feeling that the natural world was, like humanity, infused with spirit, it pained him to see nature destroyed indiscriminately. Commenting on the tendency of people to eradicate that which did not immediately serve human needs, Muir suggests that human self-interests and prejudices may prevent people from apprehending the interconnectedness of all life: "Many good people believe that the alligators were created by the Devil, thus accounting for their all-consuming appetite and ugliness. But doubtless these creatures are happy and fill the place assigned to them by the great Creator of us all" (*Thousand Mile Walk* 98).

Muir spent the greater portion of his life speaking for voiceless wilderness, but his greatest challenge came at the turn of the century. Facing possible water shortages for their growing community, city planners for San Francisco considered the possibility of damming the Hetch Hetchy Valley as early as 1882. An act of Congress in 1890 preserved Hetch Hetchy and Yosemite as a national wilderness preserve, but the city deemed its need for water more important than the protection of wilderness, and, in 1908, Secretary James Garfield approved plans to turn the valley into a reservoir. Believing that the goal of conservation was to ensure the steady supply of resources and not to protect wildlife, Gifford Pinchot, Chief Forester at the time, advised President Roosevelt to approve plans to develop the valley.

The views of Gifford Pinchot and John Muir represent the two diverging branches of the budding environmental movement of the early twentieth century. Educated as a silviculturist, Pinchot studied the conservation practices of European foresters and came to recognize that humanity did indeed possess the ability to seriously degrade nature. But Pinchot argued that, if managed properly, nature could provide for all human material needs. True forestry, he says, has an economic motive and the wilderness should be used for profit. "The job was not to stop the ax," offers Pinchot in his autobiography, "but to regulate it" (29). In one report on preserves issued by the Forest Commission and endorsed by Pinchot, officials assert that "These great bodies of reserved lands cannot be withdrawn from all occupation or use. They must be made to perform their part in the economy of the Nation. Unless the reserved lands of the public domain are made to contribute to the welfare and prosperity of the country, they should be thrown open to settlement and the whole system of reserved forests abandoned" (Pinchot 120). Pinchot's perspective of nature is shot through with pastoralist assumptions, and he contends that nature had an *obligation* to meet human material needs; thus it was quite natural to exploit the wilderness as a "resource."

Pinchot and Muir knew one another, and in the early stages of their relationship they went on outings together and shared ideas for protecting the nation's forests. But the difference between the two men's motives for conservation soon became apparent, and Muir and Pinchot became increasingly estranged over the years. On one trip to the

Colorado River and Grand Canyon, they encountered a tarantula, and their divergent responses illustrates how differently each man measures nature's value. Pinchot moved to crush the spider, but Muir intervened; "he wouldn't let me kill it," wrote an astonished Pinchot. "He said it had as much right there as we did" (103). To Pinchot, this was a bit baffling because he calculated that the spider had no value, since it did not appear to fulfill any human needs and, worse, could do an individual serious harm. Echoing these utilitarian sentiments, Roosevelt argued in 1901 that "The fundamental idea of forestry is the perpetuation of forests by use. Forest protection is not an end in itself; it is a means to increase and sustain the resources of our country and the industries which depend upon them. . . . We have come to see clearly that whatever destroys the forest, except to make way for agriculture, threatens our well-being" (qtd. in Pinchot 190).

By contrast, Muir spoke for nature in an effort to protect it for its own sake, and he contended that nature had a value outside of human economics. Muir sought to save the tarantula because, to him, all nature was infused with spirit and was thus worthy of moral consideration. Hetch Hetchy Valley, said Muir, "is a grand landscape garden, one of Nature's rarest and most precious mountain temples" (*Yosemite* 255). For many conservationists of the day, the loss of one valley more or less meant little, since there were plenty of untamed spaces left throughout the country. But to Muir, not all places were interchangeable, and the loss of a specific species or unique natural setting was irrevocable. Hetch Hetchy was not just another high alpine valley, it was home to "things

frail and fleeting," said Muir, intertwined in a close "communion" (*Yosemite* 255). ..Muir was particularly distressed by plans to destroy Hetch Hetchy for strictly economic reasons, and, together with Robert Underwood Johnson, he began a campaign of protest against what he perceived was the gross commercialization of nature. The environmental historian Roderick Nash notes that Muir hoped to generate support for his cause by posing the conflict as a case of crass materialism against noble idealism:

They made Hetch Hetchy into a symbol of ethical and aesthetic qualities, disparaging San Francisco's proposal as tragically typical of American indifference toward them. This line of defense took advantage of national sensitivity to charges of being a culture devoted entirely to the frantic pursuit of the main chance. It criticized commercialism and sordidness of American civilization, while defending the wilderness. (164)

Muir recognized that the gravest threat to nature was not human physical activity but the concepts of nature which guided those activities. For instance, an evaluation of nature based upon economic self-interest would always favor development, since, under such a rationale, the value of a mountain in tin cans will always outweigh its intangible value as scenery. The Hetch Hetchy incident underscored for Muir and other nature advocates the fact that the American wilderness would face increasing threats to its integrity as long as the public conceived of nature as humanity's boundless larder. Measuring the valley from an economic standpoint, it made perfect sense to convert Hetch Hetchy into a reservoir

for San Francisco, since it was the cheapest way to satisfy human desires for water and power. "Applying the time-honored utilitarian yardstick to the problem," reports Nash, "Representative Raker of California asserted that the 'old barren rocks' of the valley have a 'cash value' of less than \$300,000 whereas the reservoir would be worth millions" (171).

To counter this materialistic approach to nature, Muir imbued the wilderness with religious significance. He describes the untrammelled mountain valley as a "temple" and characterized human manipulation of that environment as an act of "desecration." The park, lamented the naturalist, is:

subject to attack by despoiling gain-seekers and mischief-makers of every degree from Satan to Senators, eagerly trying to make everything immediately and selfishly commercial, with schemes disguised in smug-smiling philanthropy, industriously, shampiously crying, "Conservation, conservation, panutilization," that man and beast may be fed and the dear Nation made great. Thus long ago a few enterprising merchants utilized the Jerusalem temple as a place of business. (*Yosemite* 256)

Using the Christian parable of the money-changers in the temple, Muir suggests that the offense done to Hetch Hetchy in damming would be so great as to provoke the ire of God.

The analogy serves to codify human behavior in nature. Drawing on the prescriptive power of religion, Muir re-defines nature as sacred, enabling him to characterize certain human actions in nature as profane. Muir suggests that people are welcome to "worship"

in Hetch Hetchy, but that economic activities are inappropriate because they entail alterations that transform the very quality of the environment that makes it "holy."

The notion that nature is sacred is inherently ecological since it promotes an ethic of homeostasis. In the context of religion, the devotee's behavior within the temple is circumscribed by ritual and tradition to perpetuate and reproduce the faith. In much the same way, the metaphor of a sacred wilderness implies that human conduct within nature should be guided by a set of ethics designed to maintain and reproduce the processes of life. In our relations with things sacred, we tend to see them as perfect and sufficient in and of themselves, and we oppose circumstances that would disrupt or distort that continuity. By redefining nature as a holy space, Muir encourages his audience to transfer this conservative impulse to the wilderness. Furthermore, the temple metaphor implies that humanity also stands to benefit in preserving nature. Sacred spaces afford humans spiritual, aesthetic, and emotional solace, and by preserving the wilderness, suggests Muir, we protect our own interests. In this way, the religious metaphor conveys a sense of interdependence in which the devotee has an obligation to protect and preserve that which is sacred, and the sacred, in turn, affords the worshipper with the sanctuary necessary for spiritual rejuvenation.

In the battle over Hetch Hetchy, the utilitarian view prevailed over the spiritual perspective. As Muir feared, motivated by the prevailing rationale that nature was a resource to be used, Congress passed the Hetch Hetchy bill in 1913, marking the

beginning of the end for the naturalist's beloved valley. But Muir and Johnson were able to raise a significant protest, sparking letter campaigns, a wave of critical media reports, and debate on the floor of the House and Senate. Considering the controversy that raged over the legislation, Nash surmises that the loss was not a total failure since "wilderness preservation had, in truth, become a national movement":

Indeed the most significant thing about the controversy over the valley was that it occurred at all. One hundred or even fifty years earlier a similar proposal to dam a wilderness river would not have occasioned the slightest ripple of public protest. Traditional American assumptions about the uses of undeveloped country did not include reserving it in national parks for its recreational, aesthetic, and inspirational values. The emphasis was all the other way--on civilizing it in the name of progress and prosperity. Older generations conceived of the thrust of civilization into the wilderness as the beneficent working out of divine intentions, but in the twentieth century a handful of preservationists generated widespread resistance against this very process. What had formerly been the subject of national celebration was made to appear a national tragedy. (Nash 181)

While the developers had their way with the valley, Muir and his colleagues in the preservationist movement had succeeded in changing, however slightly, the terms of the debate. Whereas conservationists like Pinchot spoke about nature as the material foundation of human life, Muir and other preservationists spoke for nature as a sacred

community of life which included humanity. As America entered the twentieth century, society had slowly come to recognize that it did possess the ability to dramatically alter the natural environment, but the majority of the public perceived that power as having only positive implications. By challenging the utilitarian view of nature with an alternative ethical perspective, Muir and his followers initiated a subtext to the rhetoric of progress that provided the vocabulary with which to evaluate the moral consequences of humanity's manipulation of the natural world.

3.3 The Price of Mastery

Muir's work to protect the environment became a well-established tradition in the twentieth century. The conflicts remained centered on values, and a variety of naturalists and writers in this century have worked to subvert the utilitarian perspective by espousing an ecological ethic. Two writers in particular, Aldo Leopold and Rachel Carson, represent a tradition of advocacy that combines science and ethics in an effort to redefine nature as a valuable living community. In this section I will discuss how economic and political factors in the first half of the century motivated Leopold and Carson to develop a rhetoric of advocacy with a distinctive ecological emphasis.

Following in the tradition of Pinchot and utilitarian conservationists, Aldo Leopold began his career in the 1909 with a job as a forest assistant and later a game manager. Working with the Forest Service in the Southwest, Leopold enforced game laws, stocked

the preserves with fish and game, and exterminated predators. In *A Sand County Almanac*, Leopold describes how as a young man he had killed wolves for no more reason than the fact that they competed with hunters for deer. In this early stage of his career, Leopold primarily followed the conservationist creed that the land should be "managed" for the optimal use of humanity, whether that was recreational or commercial.

But as Leopold became more acquainted with the close interconnections between the living and non-living components of nature, he began to challenge traditional utilitarian values. Leopold's transition from a conservationist to a preservationist was gradual. In 1913, Bright's disease incapacitated him for over a year, and he spent a great deal of time in recovery reading the works of nature writers like Muir, Burroughs, Thoreau, and others. Leopold, trained as a scientist, also read the works of ecologists like Frederick Clements, William Temple Hornaday, and Henry Cowles whose arguments--combined with his years of experience in the wilderness--convinced him of the interdependence of all living things. In the waning years of his career with the Forest Service, Leopold tried to reconcile his work of managing nature as a "resource" with his ethical convictions that nature was a "being." According to environmental historian Frank Stewart, the naturalist's experiences in a Madison forest products laboratory led him to become "increasingly uncomfortable with the economics of forestry," and in 1928 he resigned from the Forest Service (149). Leopold's biographer, Susan Flader, marks 1935 as the

year when Leopold's conversion to a preservationist ethic was complete. In that year, he and others concerned with the continuing degradation of the environment formed the Wilderness Society, a political organization dedicated to preserving wild species and habitats as they were, not as humanity wanted them.

Leopold's conversion to the role of nature advocate came about as a result of his recognition that efforts to manage or control the wilderness had resulted in the general impoverishment of the environment. Programs to eradicate wolves, cougars, coyotes, and other predators were so successful that deer populations in affected areas exploded, leaving herds to starve slowly on overgrazed ranges. In the prairies, the farmers' policy of plowing under "weeds" in favor of mono-cultured cash crops had pushed countless species of native plants to the verge of extinction. And in America's deserts, manipulation of rivers and underground aquifers to transform "wasteland" into farmland wiped out entire biotic communities which were adapted to drought conditions. Humanity's faith in its ability to control nature had led the country's politicians and leaders of industry on a quest to "improve" the wilderness by making it a more efficient producer. Over the years Leopold began to realize that land management guided by the assumption that nature existed exclusively to serve humanity had neglected to consider the ecological and ethical implications of environmental destruction.

In his later life, Leopold worked on outlining what he called a "land ethic" in which he tried to replace the utilitarian view with guidelines for relating to the "land-

community" as being rather than resource. In a chapter of *A Sand County Almanac* (1949), Leopold describes nature as a "round river," a "never-ending circuit" of life that flows from the soil to life and back to the soil again. "We of the genus *Homo* ride the logs that float down the Round River," says Leopold, "and by a little judicious 'burling' we have learned to guide their direction and speed" (188). The technique of trying to control our life raft is called economics, says Leopold, and, unfortunately, we tend to conduct economic policy in total disregard of our place in the stream of life. For instance, in the national forests, notes Leopold, replanting concentrates on marketable species, and native cedar and tamarack are "purged on the grounds of economic inefficiency" (195). Yet decisions made with the express aim of increasing the "productivity" of nature never bother to examine the effect of such tinkering on the animals, plants, and soils which depend upon the integrity of their respective biotic communities. As a result, short-sighted decisions may actually remove a key fungi here or essential insect there upon which the whole system--and, hence, our own well-being--depends. Ecology is essential, says Leopold, if we are going to "learn the hydrology of the biotic stream" and amass the "collective wisdom" necessary to navigate effectively (189).

Leopold was motivated to speak for the wilderness because he, like Muir and Thoreau, recognized that our misguided concepts of nature threatened to diminish or completely eradicate sensitive habitats and species. By the 1920s and 30s, the public's perception of nature as resource had changed little since Muir's day, and, while the

government had established agencies to look after the nation's parks and reserves, these institutions were still guided by the utilitarian approach. Leopold questioned the validity of a world view that measured the value of nature strictly in terms of cash or utility.

Within the conservation movement in Leopold's day, many felt compelled to protect nature by employing similar utilitarian measures, arguing that conservation could be profitable. But Leopold considered market economics a poor substitute for a land ethic:

Considering the prodigious achievements of the profit motive in wrecking the land, one hesitates to reject it as a vehicle for restoring land. I incline to believe we have overestimated the scope of the profit motive. Is it profitable for the individual to build a beautiful home? To give his children a higher education? No, it is seldom profitable, yet we do both. These are, in fact, ethical and aesthetic premises which underlie the economic system. Once accepted, economic forces tend to align the smaller details of social organization into harmony with them. (201)

Leopold calls for "an ethical underpinning for land economics," speculating that as the public developed an ecological conscience, economic structures would reflect those values and "align . . . social organization into harmony with them."

For Leopold, self-serving economics and conservation were ultimately incommensurable, since profiteering would always encourage destructive consumption. To illustrate this point, he describes the consequences of a Wisconsin plan that allowed farmers to determine their own soil conservation policies: "The farmers, in short, have

selected those remedial practices which were profitable anyhow, and ignored those which were profitable to the community, but not clearly profitable to themselves" (Leopold 245). As a result, overgrazing and destructive plowing methods continued unabated. The problem with relying on "enlightened self-interest" to guide conduct, notes Leopold, is that it depends on the individual identifying the self as a component of the larger human and non-human community. As many critics of capitalism have pointed out, this social view is actively discouraged by market economics.

In many ways, Leopold developed a rhetoric of advocacy to supplant the rhetoric of capitalism.⁸ Leopold claims that "An ethic to supplement and guide the economic relation to land" is the most sensible remedy to the problems generated by the economics of self-interest (251). Seeking to undermine the notion that nature is valuable only as a commodity, Leopold points out that we have other ways of valuing nature, evidenced by the aesthetic or spiritual satisfaction--what he calls a "social asset"--, that we derive from non-human nature. To illustrate the limitations of measuring nature by its "exchange value," Leopold applies the method to the "music of the goose" and finds it completely at a loss to account for its holistic, social worth:

⁸While Leopold never attacks "capitalism" directly, his critique on profiteering, economic self-interest, and the whole network of institutional influences between universities, the government, and capital suggests that he was strongly opposed to laissez-fair economics when it came to the environment.

If birds and animals are a social asset, how much of an asset are they? It is easy to say that some of us, afflicted with hereditary hunting fever, cannot live satisfactory lives without them. But this does not establish any comparative value, and in these days it is sometimes necessary to choose between necessities. In short, what is a wild goose worth? I have a ticket to the symphony. It was not cheap. The dollars were well spent, but I would forgo the experience for the sight of the big gander that sailed honking into my decoys at daybreak this morning (228-9).

If society were to rely on the market to save the environment, there would be little nature left that did not turn a profit. "One basic weakness in a conservation system based wholly on economic motives," says Leopold, "is that most members of the land community have no economic value. Wildflowers and songbirds are examples. Of the 22,000 higher plants and animals native to Wisconsin, it is doubtful whether more than 5 per cent can be sold, fed, eaten, or otherwise put to economic use" (246):

To sum up: a system of conservation based solely on economic self-interest is hopelessly lopsided. It tends to ignore, and thus eventually to eliminate, many elements in the land community that lack commercial value, but that are (as far as we know) essential to its healthy functioning. It assumes, falsely, I think, that the economic parts of the biotic clock will function without the uneconomic parts (251).

Against the utilitarian perspective, Leopold offers an alternative ecological approach in which the non-human beings are viewed as "members of the community"--a living web

which includes humanity. To Leopold, this new metaphor better represents the real bonds that exist between humanity and nature, and such a view encourages people to relate to nature as a moral, as opposed to a strictly commercial, entity. While Leopold admitted that market capitalism provided the dominant view of nature, he noted that the public had made a noticeable shift toward an ecological perspective: "We have no land ethic yet, but we have at least drawn nearer the point of admitting that birds should continue as a matter of biotic right, regardless of the presence or absence of economic advantage to us" (247).

Leopold observes that for those who embrace this "enlightened view," it becomes evident that "no special interest has the right to exterminate [other creatures] for the sake of a benefit, real or fancied, to itself" (247).

By the mid-twentieth century, science had gained a better appreciation of what Leopold called the "small cogs and wheels" of nature, but industry had used that knowledge to better manipulate the natural world for the convenience of humanity. For Rachel Carson, who, like Leopold, had been trained as a scientist, the unwillingness of science and industry to weigh the value of inventions against related environmental damage was unconscionable. As a result of our technological hubris, argues Carson, we had "waged war" on the environment in an effort to subdue and control it. From the early part of the century through the 1950s, science made astounding discoveries in chemistry, genetics, and physics that greatly enhanced humanity's understanding of the physical universe. Instead of inspiring a degree of reverence and restraint, this newfound

understanding of nature's complexities led scientists and policy-makers to be more confident than ever about their ability to manipulate and exploit nature. In light of the awesome new powers conferred upon humanity through technology, says nature historian Frank Stewart, "the natural world had come to seem quaint and backward compared with the marvelous conveniences that American industry and technology provided in the 1950s" (162).

One of the "marvelous conveniences" of the technological age, DDT, threatened to destroy whole populations of insects and birds, as well as damage human health. Alarmed by the growing tendency of science to micro-manage nature in total disregard of broader ecological implications, Carson wrote *Silent Spring* in 1962 to expose the dangers of the indiscriminate use of pesticides. She begins her book by describing how hypothetical "Anytown," once thriving with human and non-human life, succumbs to a sinister blight:

There was once a town in the heart of America where all life seemed to live in harmony with its surroundings. . . . Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community. . . . No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world.

The people had done it to themselves. . . . This town does not actually exist, but it might easily have a thousand counterparts in America or elsewhere in the world. (1-3)

Relying on assurances from the government and industries that pesticides like DDT posed a minimal threat to humanity, the public was little concerned with the aerial

extermination campaigns being waged in rural and suburban America. In a calculated effort to shake the public out of its lethargy, Carson relied on pathos to generate widespread concern, offering apocalyptic visions of a world thrown out of balance by human meddling.

The destructive effects of many of the chemical compounds discussed in Carson's book had been known for some time, but various governmental institutions and the corporations that manufactured the chemicals minimalized the dangers and kept their products' most unappealing aspects from the general public. In *Silent Spring*, Carson demonstrates that chemical variations of chlorinated hydrocarbons like DDT or dieldrin destroy non-target species of insects, fish, amphibians, and birds, and, once in the food chain, pose significant health risks to people. What's more, Carson questions the integrity of scientists who, funded by industry, had betrayed their obligation to improve the lives of general public by serving commercial interests instead. As proof, she underscores the fact that many scientists have developed chemicals, herbicides, or other toxins without ever fully considering the consequences of their tinkering. They are like the wizard's assistant who, having cast the spell, becomes overwhelmed by the magic he performed. The most obvious example is the by-product of nuclear fission--radiation, which, says Carson, "is now the unnatural creation of man's tampering with the atom" (7). Carson depicts modern physicists and chemists as real life Frankensteins whose abominations of nature are turned loose on society.

Carson's criticism of corporate interests and industry scientists was met with a vicious counter-attack. Members of the scientific community, industry representatives, and government officials questioned Carson's standing as a scientist because she was a woman and--on a related theme--because she had diverged from accepted standards of "objectivity" by integrating ethics and emotions into science. Stewart compiled a sampling of the attacks on her character:

For advocating for a more cautious approach to biocides--many of which contaminated the environment globally and perhaps irreversibly--she was labeled a "hysterical woman," an old maid, and "not a real scientist." One government official quipped, "I thought she was a spinster; what's she so worried about genetics for?" Another government leader dismissed her as part of the "vociferous, misinformed group of nature-balancing, organic gardening, bird-loving, unreasonable citizenry." (163)

As a woman in a male dominated field, Carson challenged not only the gender boundaries which had so long silenced women's voices, but also the patriarchal modes of thinking which inevitably suppress the interests of both women and nature. In the 1950s and 60s, the science upon which government and industry depended reflected the patriarchal values of the day. Guided by the dominant hierarchal, mechanistic perspective of nature, science and industry treated the physical world as lifeless matter meant to satisfy human desires. The "sentimental" view of nature as animate and sentient was rejected as an

inaccurate account of reality. Because Carson assessed nature in qualitative terms and anthropomorphized nature, her work was discounted as the "mystical" rantings of one whose judgement was irrevocably tainted by emotions. But to Carson, emotion and ethics were exactly what was missing from the scientific assessment of nature. By holding the world at arm's length, as if it were a separate and lifeless object, science and industry were able to justify the most horrendous acts of ecological destruction. Like Leopold, Carson extends the notion of community to nature in an effort to redefine our connection to nature as an ethical rather than economic relationship.

The venom with which corporate America attacked Carson is an indication of the danger that this new ethical perspective of nature posed to market capitalism. Fearing that concerns over public health and environmental destruction would cut into profits, chemical manufacturers scrambled to shore up society's confidence in science's ability to control nature. Carson's biographer, Paul Brooks, reports that Monsanto Chemical responded to *Silent Spring* with a parody called *The Desolate Year*. In this piece of corporate propaganda, the company described a terrible world in which, in the absence of pesticides, the human race is overwhelmed by parasites and vermin. Reiterating the perspective promulgated in the wilderness tradition, Monsanto suggests that humanity and nature are adversaries, and that chemicals are the magic bullet that finally shifts the balance of power in humanity's favor. Similarly, the an article in the *American Agriculturalist* described a future without chemicals in which people had to resort to

foraging for acorns to survive. In this and other instances, the chemical manufacturers, government agencies, and agri-businesses fought to deny Carson's claims that nature was threatened by re-asserting the validity of the old standard image of the "howling wilderness."

The concerted effort to suppress *Silent Spring* also demonstrated that the utilitarian view promulgated by corporate America permeated government institutions and, consequently, all walks of public life. Brooks reports that university nutritionists lined up to criticize Carson's contention that prepared foods contained pesticides. But, as the historian points out, university laboratories were heavily funded by the food industry, and scientists may have been compelled to lambaste Carson rather than risk their funding. The American Medical Association also supported the chemical industry, but the organization's stance suggested some bias, since "Carson's strongest supporters came from specialists in public health" (Brooks 297). By contrast, the reviews of the popular press, says Brooks, "were overwhelmingly favorable" (297).

The greatest threat to the chemical manufacturers was that *Silent Spring* moved people from a position of relative apathy to moral indignation. Carson accomplished this shift in perspective by demonstrating that it is impossible to separate our physical modifications of nature with their ethical consequences. For instance, she explains that once DDT is released in the environment and makes its way to our food chain "the poison may . . . be passed on from mother to offspring," causing fetal mutations or even death.

The "chemical barrage" employed to subdue a few specific pests is indiscriminately "hurled against the fabric of life," says Carson, like a crude "cave man's club" (297). In the end, clumsy and often violent efforts to manage a few threads of nature threaten to unravel the whole fabric:

The "control of nature" is a phrase conceived in arrogance, born of Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man. . . . It is our alarming misfortune that so primitive a science has armed itself with the most modern and terrible weapons, and that in turning them against the insects it has also turned them against the earth. (Carson 297)

The question that is raised by this monomaniacal drive for mastery, offers Carson, is "whether any civilization can wage relentless war on life without destroying itself, and without losing the right to be called civilized" (99).

In her critique of the chemical "war" on the environment, Carson succeeded in generating public concern over pesticides. More importantly, however, Carson succeeded in raising serious doubts in the mind of the average citizen about the credibility of the utilitarian perspective of nature promulgated by industrial capitalism. Carson begins by dismantling old assumptions about the regenerative powers of nature, underscoring the fact that humanity wielded the power to destroy species, habitats, and, potentially, all life. This allows her to expose the irony of modern society's quest for mastery: the power to manipulate life, now largely realized, has forced us to admit our dependence. In addition,

Carson raises concerns about the motives behind the utilitarian world view, suggesting that pesticides were created by "Neanderthal" science and rushed to market without complete testing. In the service of industry, Carson showed how science had manipulated the natural world in the interests of profit, all the while compromising the environment and public health. As a result, the public began to question not only the findings of science, but its methods.

Like Leopold, Carson offers ecology an alternative to the utilitarian view of nature promoted within the institutions of capitalism. Carson realized that technological hubris paired with economic exploitation posed a grave threat to the integrity of both human and non-human life. Her response, like that of advocates before and after, was to redefine both nature and, more importantly, humanity's relationship to the natural world in ecological and ethical terms. Re-inserting humanity into the living matrix of nature's fragile web, Carson shows that our survival depends upon the continued health of the whole bio-sphere. With this compelling alternative cosmological model comes new obligations for humanity, including a radical set of ethical guidelines with which to measure human conduct. Viewed as part of nature, humanity is compelled to measure the value of its actions by their consequences on the whole environment. Upon establishing this perspective, Carson is able to encourage her audience to look to their own self-interests in a way that protects both human and non-human existence.

PART TWO
CHARACTERISTICS OF ADVOCACY

CHAPTER IV
INTERPRETING THE LANGUAGE OF NATURE

I wish to speak a word for Nature, for absolute freedom and wildness, as contrasted with a freedom and culture merely civil,--to regard man as an inhabitant, or a part and parcel of Nature, rather than a member of society. I wish to make an extreme statement, if so I may make an emphatic one, for there are enough champions of civilization; the ministers and the school committee and every one of you will take care of that.

H. D. Thoreau, from "Walking"

Speaking for nature is a relatively new development in Western culture and entails a host of rhetorical approaches unique to the act of advocacy. Distinctly different from traditional representations of nature as an object or resource, advocacy depicts nature as an animate, sentient participant in human affairs. But unlike other anthropomorphic depictions of nature which simply mirror humanity in non-human nature, the advocates are motivated by the desire to promote nature's perceived interests within the human political sphere. The advocates reject depictions of nature as a hostile wilderness, a boundless paradise, or a useful commodity as inaccurate and destructive. Attempting to describe nature in ways that coincide more closely with their actual experience of the

natural world, the advocates represent nature as a speaking entity. What's more, the advocates accomplish this by redefining both our views of nature and our notions of language. The result is that the advocates create an image of nature as an animate, sentient, moral community, making it possible to completely reinterpret humanity's relationship to the natural world.

While nature advocates come from a wide range of social, political, and religious backgrounds and employ an incredible array of rhetorical devices, those who speak for nature share a few distinctive approaches. First, the advocate draws on a close affinity with nature to interpret the language of the natural world; second, the advocate represents the language of nature as direct or indirect discourse; finally, the discourse that develops out of this translation is distinctly deliberative in its aims, or, more specifically, it seeks to transfer power to nature. In this chapter, I will focus primarily on describing the first characteristic of advocacy: the act of interpreting the language of nature. Subsequent chapters in Part II will examine the rhetorical conventions that advocates use to convey nature's interests and the ways that advocacy functions to transfer power to non-human nature.

4.1 Who Speaks for Wolf?: The Role of the Advocate

In 1982, Paula Underwood Spencer, an Oneida Indian, began translating into English the many stories passed down to her by her family. One of those tales is entitled "Who Speaks for Wolf," and it dramatizes the need for humanity to advocate for non-human nature. In the story, an expanding tribe finds itself outgrowing the bounds of its current territory, so the elders send a search party out to discover an alternative place. The new site the tribe considers has many desirable qualities, but it also happens to be "the center place for a great community of wolf." The tribal council meets to discuss the matter and listens to all who had views on the matter, with one exception. Wolf's Brother, named for his affinity with the pack, was away at the time. Noticing Wolf's Brother's absence at the council, one of the community--concerned that not all parties would be duly represented--cautions the tribe not to proceed, asking "who, then, will speak for wolf?" But the council makes up its mind without hearing what Wolf's Brother might say on behalf of the wolves and settles on moving the tribe into the pack's territory.

When Wolf's Brother returns, he is dismayed by the fact that none had considered the lives of the wolves in making such an important decision. He, more than any other person in the tribe, understood the wolves:

He was so much Wolf's brother
that he would sing their song to them
and they would answer him

He was so much Wolf's brother
that their young
would sometimes follow him through the forest
and it seemed they meant to learn from him. (20)⁹

Knowing that this expropriation would impose hardships on all, Wolf's Brother advised his people to re-locate, arguing that the intrusion of humans into the community of wolf was a short-sighted solution. Altering human habits to agree with the environment, he suggests, would be more efficient and ethical:

I think that you will find
that it is too small a place for both
and that it will require more work than--
than change would presently require. (27)

Despite these protests, "The People closed their ears / and would not reconsider" (27). In time, they come to regret excluding the voice of Wolf's Brother, as the needs of the wolf and the desires of the tribe come into conflict time and time again:

They began to see--
for someone would bring deer or squirrel

⁹The myth is related in prose with stylized line breaks. No line numbers are indicated, thus, parenthetical notations designate page numbers.

and hang him from a tree
and go for something to contain the meat
but would return
to find nothing hanging from the tree
and Wolf beyond. (29)

When the problems associated with occupying the wolves' territory become intolerable, the council convenes to determine the appropriate response. One of the options the people consider is the eradication of the pack in order to secure their own well-being. But such a solution has both economic and moral costs, and the tribe is compelled to re-evaluate their relationship to their non-human neighbors:

The tribe met again to consider their options.

They saw

That it was possible

to hunt down this Wolf People

until they were no more

But they also saw

That this would require much energy over many years

They saw, too

That such a task would change the People:

they would become Wolf Killers

A people who took life only to sustain their own

would become a People who took life

rather than move a little

It did not seem to them

That they wanted to become such a people. (33-4)

A deteriorating quality of life for both the tribe and the animals forces the council to recognize that human efforts to secure material needs from nature necessarily entails an obligation to consider the continued well-being of nature.

The tale concludes with a lesson about living in this world as members of a larger community. The tribe learns that its survival is intimately intertwined with the interests of the non-human community. Protecting those interests requires a concerted effort on the part of the tribe to represent nature in the human political sphere. Since human opinion and consequent conduct are largely guided by language, the speechless wolf is practically powerless in the realm of human affairs. As a result, the elders determine that it will be necessary to advocate for those interests in the council:

At the end of their Council

one of the Eldest rose again and said:

"Let us learn from this

so that not again

need the People build only to move

Let us not again think we will gain energy

only to lose more than we gain

.....

Let us now learn to consider Wolf!" (36)

The story illustrates the methods the Oneida devised to facilitate their understanding of how human actions impacted other animals in their environment. The process is only possible if the interests of nature are represented linguistically by a human advocate. Wolf's Brother is close to the wolf, speaks its "language," and understands its needs. When the wolves are threatened, Wolf's Brother dissents from the group and speaks out of an allegiance to both wolf and people. In this way, Wolf's Brother is a necessary mediator between nature and humanity who, by virtue of his intimate association with nature, employs language to bridge the gulf that separates the human tribe and the "wolf people."

The Oneida tale of Wolf's Brother demonstrates how one culture's impact on the environment leads to a state of crisis which can only be resolved by a fundamental transformation of relations of power between humanity and nature. The legend of Wolf's Brother provides a broadly applicable example of the conditions which compel a society to develop a rhetoric of advocacy. Like the Oneida, the nature writers examined in this study are motivated to integrate the voice of nature into the sphere of human political life because they recognized that nature was threatened by human actions. The advocate works to alter destructive conduct towards nature by changing our perceptions of the natural world. More significantly, as Wolf's Brother demonstrates, the advocate seeks to transform the *way* we talk about nature, making advocacy a necessary and permanent component of human discourse on the natural world.

4.2 Interpreting the Language of Nature

One of the defining characteristics of the rhetoric of advocacy is that the advocate attributes language to nature. Working against a long standing tradition of defining language as exclusively a human prerogative, the nature advocate invests the non-human world with its own voice. Relying on evidence gained through experience and intuition, many nature writers conclude that other organisms, far from being inarticulate, inscrutable beings, are capable of exhibiting various ranges of needs, desires, preferences,

emotions, and interests. Similarly, the ecosystem--the whole connection of animate and inanimate nature--expresses its relative health and well-being to the attuned observer. However, since we rely exclusively on language to apprehend intent and interests in others, we are forced to dismiss the needs and desires of non-human nature as unknowable and even non-existent. The advocate asserts that we can know, even if imperfectly, the interests of an animal, a species, or an eco-system by interpreting the non-linguistic phenomena of the natural world as the meaningful expression an animate and purposeful community. Such interpretation develops out of intimate contact with the natural world and the application of affective ways of knowing.

The initial challenge for the advocates in representing the voice of nature is the task of interpreting their observations or intuitions of the external world. The nature writer is, obviously, a language-using human, and thus is inescapably a member of a society which exercises linguistic and physical domination over nature. But spiritually and physically the advocate identifies with nature and forms a strong allegiance to non-human life. The nature writer often underscores this affinity with the natural world, and claims to feel an overwhelming sense of community with other organisms. Dave Foreman, founder of EarthFirst!, describes his connection to the natural world as intense physical and moral sympathy: "When a bulldozer rips through the Amazon rain forest, it's ripping into my side. When a Japanese whaler fires an exploding harpoon into a great whale, my heart is

blown to smithereens. I am the land, the land is me" (Foreman 5). Similarly, the love of wilderness, says Edward Abbey, "is an expression of loyalty to the earth. . . the only paradise we ever need--if we only had eyes to see" (*Desert Solitaire* 190). This identification with nature, expressed by almost all advocates, predisposes them to be nature's representatives.

Yet the advocate does not completely renounce humanity, but occupies a position on the fringe of it. The advocate lives in both worlds--human and non-human--, speaks both "languages," is allied to both categories of life, and therefore is ideally qualified to serve as a medium or conduit for transforming the relationship between humanity and nature. In fact, the interpretive powers of the advocates depend upon their membership in both realms. Like Wolf's Brother, advocates generally see themselves not as distinct from nature, but as an extension of nature's "tribe" or community. Our alienation from the non-human members of the living community is largely self-imposed, as we use language to establish a qualitative difference between ourselves and the rest of existence. In an effort to dismantle this conceptual barrier, the nature representatives shuttle back and forth between silence and language, nature and humanity, and experience and meaning, constructing a more productive understanding of non-human nature.

Almost every nature writer who acts as advocate claims to occupy the role by virtue of a "nature experience." The nature experience takes a variety of forms, but it generally

involves a profoundly moving interaction or connection with nature in which the advocate experiences the sensation--if even for a moment--that he or she exists as an inseparable component of nature. Hiking through the Sierra Nevadas, John Muir makes a difficult climb in which he comes dangerously close to falling. After a moment of fear, he finds that this elemental struggle in and with nature redefines him fundamentally as a part of the natural world, motivated as much by "Instinct" and "experiences" as rationality:

When this final danger flashed upon me, I became nerve-shaken for the first time since setting foot on the mountains, and my mind seemed to fill with a stifling smoke.

But this terrible eclipse lasted only a moment, when life blazed forth again with preternatural clearness. I seemed suddenly to become possessed of a new sense. The other self, bygone experiences, Instinct, or Guardian Angel,--call it what you will,--came forward and assumed control. . . . I found a way without effort, and soon stood upon the topmost crag in the blessed light. (Muir *Mountains of California* 64-65)

Muir suggests in this passage and elsewhere that there are other ways to know nature besides the rational and "objective" assessment of facts. In instances where one seeks a clear understanding of the natural world, dramatized most vividly in Muir's basic struggle for life, instinct, experience, and intuition--in short, affective ways of knowing--prove invaluable perceptive faculties. In Muir's nature experience, his very survival depends

upon the mind relinquishing control to feeling and faith, and that shift in perception provides the understanding that allows him to navigate his way safely up the mountain. The incident provides a model of Muir's interpretive approach to nature. One's understanding of nature, suggests the naturalist, depends on intimacy and integration over alienation and detachment, and on intuition and experience over cold analysis.

In a world far removed from the breathtaking heights of the Sierra Nevadas, Edward Abbey had a similar experience in the barren Arches National Monument. On one of his many hikes in the Moab Desert, Abbey describes how, as the result of days of intense solitude in nature, he begins to feel his self dissipate, blending and merging with the external world:

I climbed through the caves that led down the foot of Mooney Falls, 200 feet high. What did I do? There was nothing that had to be done. I listened to the voices, the many voices, vague, distant but astonishingly human, of Havasu Creek. . . . The days became wild, strange, ambiguous--a sinister element pervaded the flow of time. I lived narcotic hours in which like the Taoist Chuang-tse I worried about butterflies and who was dreaming what. . . . I slipped by degrees into lunacy, me and the moon, and lost to a certain extent the power to distinguish between what was and what was not myself; looking at my hand I would see a leaf trembling on a branch. (*Desert Solitaire* 225)

As a result of intense and intimate contact with nature, Abbey, like Muir, develops an intuitive understanding of the non-human world. Nature's strangely human expressiveness and Abbey's own animal nature bring observer and observed into such close symmetry that it becomes difficult for the author to distinguish where one ends and the other begins. Removing the strict barriers between self and other, nature and human, Abbey is able to detect in the workings of nature a language which is "astonishingly human." As with Muir, that interpretation is made possible by Abbey's identification with nature, and, by extension, his readiness to attribute voice to nature. The end of this nature experience is signaled by the return of a sense of alienation and radical difference fostered by the more exclusive forces of human language. Abbey's heightened sense of awareness is broken when the ego or self--which is culturally constructed through language--reasserts itself; at this point, says Abbey, he "regained everything that seemed to be ebbing away."

Most advocates consider their affinity with nature a rarity, and in many cases, nature writers lament the fact that they are among the few who can hear, as Abbey did, nature's "voice." To those initiated into the silent discourse of nature, the majority of the human race has been led to suppress the affective faculties necessary to interpret nature's meaning and thus must rely on the advocate to interpret and translate. Those who live in close contact with nature are not automatically attuned to its voice. It takes a special mind set--one of appreciation as opposed to appropriation, one geared to contemplation

and aesthetics as opposed to conquest and economics--to become literate in the language of the wilderness. For Aldo Leopold, the landscape was animated with expression, the whole community of nature infinitely capable of communicating intentions, emotions, and designs to those patient enough to learn nature's various dialects:

There is much small talk and neighborhood gossip among pines. By paying heed to this chatter, I learn what has transpired during the week when I am absent in town. . . . Every spring I find a few such decapitated trees, each with its wilted candle lying in the grass. It is easy to infer what has happened, but in a decade of watching I have never seen a bird break a candle. It is an object lesson: one need not doubt the unseen. (89)

Some would argue that attributing language to non-human nature is merely the anthropomorphic flights of the imagination and that there is no rational basis for discerning language in the behaviors of other species or natural events. Ursula Le Guin, author of many talking animal stories, addresses the problems associated with investing animals with speech in the preface to her series of short stories, *Buffalo Gals*. She points out that we universally assume that animals are mute, but suggests that we do so out of our own ignorance of nature's language. Incapable or unwilling to hear nature's voice or speak nature's language, it is we who are dumb--both mute and stupid--for having alienated ourselves from the community of nature:

Animals don't talk--everybody knows that. Everybody, including quite small children, and the men and women who told and tell talking-animal stories, knows that animals are dumb: have no words of their own. So why do we keep putting words into their mouths?

We who? We the dumb: the others. (Le Guin 11)

For those who enjoy an intimate relationship with the natural world, the "continuity, interdependence, and community of all life, all forms of being on earth, is a lived fact," says Le Guin; in giving voice to nature, that reality is "made conscious in narrative" (11). For Le Guin, interpretation is merely a matter of making articulate in human discourse what nature acts out daily in the interactions of the whole living community.

In the short story "Buffalo Gals," Le Guin suggests that privileging detached reason over immediate experience has effectively silenced nature's voice and, hence, distorted our perception of our own importance relative to non-human life. In the tale, a young girl gains a more intimate understanding of nature when she is compelled to rely more on insight than vision. Lost in the mountains after a plane crash, the girl suffers a severe injury to her eye. Taken in by the animal community, a bluejay replaces her damaged eye with a lump of pine pitch. Miraculously, her vision is restored and she sees all her animal companions clearly (although through a slight yellow tint). What she sees through this organic eye is a community of sensitive, conscious, articulate animals living in balanced

symbiosis. It is as if her vision of this world is facilitated by the merging of her self and the external world, represented--appropriately enough--by the pitch lodged in her eye socket. As the child discusses returning to the human world, she asks if she can keep her pine pitch eye, suggesting that her ability to perceive the living community of which she is a part depends upon her continued integration with nature (Le Guin 51).

The slow forgetting of nature's language, suggests Le Guin, is accomplished through indoctrination into a world view that is distinctly mechanistic, one that privileges reason and a hierarchal ordering of the natural world. For Le Guin as well as many environmentalists and feminists, the will to dominate manifests itself in the form of an oppressive regimen to silence the disempowered and unrepresented:

By climbing up into his head and shutting out every voice but his own, "Civilized Man" has gone deaf. He can't hear the wolf calling him brother--not Master, but brother. He can't hear the earth calling him child--not Father, but son. He hears only his own words making up the world. He can't hear the animals, they have nothing to say. Children babble, and have to be taught how to climb up into their heads and shut the doors of perception. No use teaching women at all, they talk all the time, of course, but never say anything. This is the myth of Civilization, embodied in the monotheisms which assign soul to Man alone. (11-12)

Denying language to all but man reflects a pervasive belief in a hierarchy of life, with *mankind* placed securely at the top. Objectivity facilitates a hierarchal and mechanistic world view in that it reduces all of nature to quantifiable entities. Under the dominant paradigm of scientific rationalism, objectivity is valued over other methods of knowing because it assumes a higher degree of control--asserting that it is possible to hold the world at arm's length for observation and, ultimately, mastery.

By contrast, the advocate contends that to be effective, reason must integrate intuition because it allows for a more immediate knowledge of one's subject. Advocates set themselves apart from those who seek only quantifiable understanding of the external world; interpreting nature involves both the intuitive and the rational in construction of a qualitative understanding of nature. From this perspective, opinions about the aesthetic or moral value of nature constitute valid "knowledge" of the natural world. Instead of promoting detachment, the advocates contend that one's ability to interpret nature is dependent upon one becoming as fully integrated into nature as possible.

As part of nature, humanity has the ability to comprehend nature's language, but as a result of societal pressures, artificial distractions, or moral or spiritual defects, say advocates, the majority of the general public have stopped their ears to all but their own voice. Annie Dillard contends that nature's voicelessness is largely a function of our atrophied perceptive faculties. As a culture we have divested nature of any meaning or

purpose outside of the bio-mechanical principles discernable through science. Pointing to overturned religious cosmologies, Dillard contends that Western society lost an important avenue for understanding nature when we denied nature spirit and dignity:

God used to rage at the Israelites for frequenting sacred groves. I wish I could find one. Martin Buber says: "The crisis of all primitive mankind comes with the discovery of that which is fundamentally not-holy, the a-sacramental, which withstands the methods, and which has no 'hour,' a province which steadily enlarges itself." Now we are no longer primitive; now the whole world seems not-holy. We have drained the light from the boughs in the sacred grove and snuffed it in the high places and along the banks of sacred streams. We as a people have moved from pantheism to pan-atheism. Silence is not our heritage but our destiny; we live where we want to live. (*Teaching a Stone to Talk* 87)

The voice of nature is exuberant and persistent, yet we choose not to hear it, suggests Dillard, being too fearful of what those voices reveal about our universe and ourselves. The incredible profusion of life exhibited in nature and the power with which the forces of the universe shape human existence can be such a humbling experience, speculates Dillard, that we elect to deny the evidence of our own senses in favor of safer and more flattering imaginings of ourselves:

They [the Israelites] heard God's speech and found it too loud. The wilderness generation was at Sinai; it witnessed there the thick darkness where God was: "and all the people saw the thunderings, and the lightnings, and the noise of the trumpet, and the mountain smoking." It scared them witless. Then they asked Moses to beg God, please, never speak to them directly again. "Let not God speak with us, lest we die." Moses took the message. And God, pitying their self-consciousness, agreed. He agreed not to speak to the people anymore. (*Teaching a Stone to Talk* 87-88)

Fear of a hostile wilderness, distrust of our own intuitive powers, and our narcissistic rationality have blunted our perceptive and imaginative powers, and we have sabotaged our ability to comprehend nature's language. "It is difficult to undo our own damage," laments Dillard, "and to recall to our presence that which we have asked to leave. . . . The very holy mountains are keeping mum" (*Teaching a Stone to Talk* 88).

In many of the "nature experiences" described by advocates, integration with the natural world is facilitated by a loss of language. One of the challenges of interpreting the voice of nature, suggests Dillard, is circumventing our own language long enough to apprehend the non-linguistic discourse going on continuously in the natural world. In *Pilgrim at Tinker Creek*, Dillard describes how she achieves a state of silent awareness in the relatively settled confines of Virginia. Driving along the interstate, Dillard pulls off a

quiet road to get gas and, in the span of a few meditative moments petting a puppy, she experiences a moving connection with nature:

My hand works automatically over the puppy's fur, following the line of hair under his ears, down his neck, inside his forelegs, along his hot-skinned belly.

Shadows lope along the mountains' ruffled flanks; they elongate like root tips, like lobes of spilling water, faster and faster. A warm purple pigment pools in each ruck and tuck of the rock; it deepens and spreads, boring crevasses, canyons. As the purple vaults and slides, it tricks out the unleafed forest and ruffled rock in gilt, in shape-shifting patches of glow. These gold lights veer and retract, shatter and glide in a series of dazzling splashes, shrinking, leaking, exploding. . . . The air cools; the puppy's skin is hot. I am more alive than all the world. (*Pilgrim at Tinker Creek* 78-9)

For Dillard--as with Abbey, Muir, and many other nature writers--interpreting the language of nature requires opening the channels of intuition, sensation, and other forms of perception that by-pass self-consciousness and intellectual reasoning. Part of relinquishing that self-consciousness and reasoning entails shutting off, as much as possible, one's own language. In the fleeting moments in which this is accomplished, the speechless language of nature rushes in to fill the linguistic vacuum created in the mind of the advocate.

However, as Dillard can attest, when one moves from experiencing nature to conceptualizing the experience, language intervenes and the experience of the present is lost:

This is it, I think, this is it, right now, the present, this empty gas station, here, this western wind, this tang of coffee on the tongue, and I am patting the puppy, I am watching the mountain. And the second I verbalize this awareness in my brain, I cease to see the mountain or feel the puppy. I am opaque, so much black asphalt.

(Pilgrim at Tinker Creek 78-9)

For Dillard, verbalizing experience shifts the observer's awareness away from the observed and onto language and the self. What concerns Dillard and other advocates is the tendency of human language to act as a divisive force between humanity and nature. As our internal voices prattle on through experience, it tends to prevent us from attending to the expressions of the nature going on all about us. Too often, language is used to shore up our sense identity and distinctness, to prevent us from having to face the unsettling proposition that we are unavoidably integrated with the natural world. The nature experience seems to be contingent upon letting the self become transparent, upon relinquishing the ego and the control it affords.¹⁰

¹⁰Dillard's perspective harkens back to Emerson's "transparent eyeball," and the nature writers resemble each other in their notions of the role of the observer. While Emerson is

For advocates, interpreting nature demands, to a certain degree, the suppression of the self. The self, which is largely constructed by abstractions and reflections made possible by language, maintains itself through differentiation. The slow dissolve of the self is described by many advocates as one strategy that helps them identify with non-human nature. In the short story "Teaching a Stone to Talk," Annie Dillard describes the unique mental conditioning necessary to attune oneself to the voice of nature. Dillard recounts the efforts of Larry--a loner who lives in a remote shack--who is trying to teach a stone to talk. The ability to hear and understand what nature has to tell us involves patience, concentration, and a degree of selflessness characteristic of the advocate. Observing Larry's efforts, Dillard concludes that "the ritual involves sacrifice, the suppression of self-consciousness, and a certain precise tilt of the will, so that it becomes transparent and hollow, a channel for the work" (*Teaching a Stone to Talk* 86). The ability to hear the voice of nature seems contingent upon the ability to transcend language, the defining characteristic by which we distinguish ourselves as separate from the rest of the universe. Once that exclusive barrier is removed, restrictions on what does and does not constitute

less interested in nature as an end in itself, he and Dillard seem to agree that nature can serve as a medium for elevating human spirit. Like Dillard, Emerson describes how moments in nature are accompanied by a loss of self ("mean egotism vanishes") and a corresponding flash of insight--"I see all; the currents of the Universal Being circulate through me." While Emerson focuses primarily on the importance of nature to the human

language disappear, and nature becomes infinitely expressive. In the wordless nature experience described by the advocate, the observer joins nature in its silence in order to apprehend an entirely different language.

Dillard describes the process of attuning oneself to nature's language as a matter of clearing the mind of one's own voice and making way for the presence of another's:

At a certain point you say to the woods, to the sea, to the mountains, the world, Now I am ready. Now I will stop and be wholly attentive. You empty yourself and wait, listening. After a time you hear it: there is nothing there. There is nothing but those things only, those created objects, discrete, growing or holding, or swaying, being rained on or raining, held, flooding or ebbing, standing or spread. You feel the world's word as a tension, a hum, a single chorused note everywhere the same. This is it: this hum is the silence. (*Pilgrim at Tinker Creek* 89-90)

Dillard suggests that the ability to interpret nature's voice is a matter of attentiveness. By quieting her own speech, by "emptying" herself, she sets aside all expectations about what nature should or might say and accepts nature's language on its own terms.

From the perspective of scientific rationalism, the unintelligible chirp of birds or the mysterious symbiosis of species intend nothing and mean nothing. For Dillard, Abbey,

soul, he, like many advocates, contends that both humanity and nature are manifestations of the same essence.

and others, nature's silence is its language. It says nothing recognizable by our linguistic standards, yet "the world's word [is] a tension, a hum," says Dillard, that you "feel." Nature's language--the whistle of a bird, the scat of a coyote, the rings of an oak--is by contemporary linguistic standards nothing intelligible at all. In light of these interpretive shortcomings, the task for the advocates is to re-invest nature's silence with voice. But rather than foisting human defined language on nature, we must begin, say many advocates, with the silence. Within the speechless silences of the wilderness, observes Dillard, lies nature's voice:

Now speech has perished from among the lifeless things of earth, and living things say very little to very few. Birds may crank out sweet gibberish and. . . pigs say, as you recall, oink, oink. But so do cobbles rumble when a wave recedes, and thunders break the air in lightening storms. I call these noises silence. It could be that wherever there is motion there is noise, as when a whale breaches and smacks the water--and wherever there is stillness there is the still small voice, God's speaking from the whirlwind, nature's old song and dance, the show we drove from town. At any rate, now it is all we can do, and among our best efforts, to try to teach a given human language, English, to chimpanzees. (*Teaching a Stone to Talk* 88)

To Dillard, the phenomena of nature represent the universe's "still small voice." We can try to attune ourselves to that language, or try to wrest from nature some meaning in the form of some "given human language."

Like Dillard, Edward Abbey takes nature's silence as its unmistakable, resounding voice. The refusal on the part of nature to say anything intelligible to humanity is its only comment. Abbey posits that nature's existential meaninglessness is, paradoxically, the source of a transcendent value:

Whirlwinds dance across the salt flats, a pillar of dust by day; the thornbush breaks into flame at night. What does it mean? It means nothing. It is as it is and has no need for meaning. The desert lies beneath and soars beyond any possible human qualification. Therefore, sublime. (*Desert Solitaire* 219)

Listening intently for nature's voice the advocate is confronted with silence; and in that mute meaninglessness the advocate discovers that nature is articulate in its own way to suit its own purposes. And that, says Abbey, is the beauty in nature's discourse.

One explanation that advocates offer for their unique ability to interpret the voice of nature is that they operate under a broader definition of language. It is not that they claim to possess a mysterious, psychic sixth sense, but that this broader frame of reference allows for a more insightful and worthwhile perspective of nature. We have to relinquish our exclusive hold on language, argue the advocates, in order to hear meaning outside of

human discourse. Thus, from this perspective, interpretation of nature is not a mystical matter, but a conceptual one. Our knowledge of the natural world and our ability to live as a member of its community is improved by seeking to interpret nature qualitatively. One way to do this, demonstrate the advocates, is to give hearing to nature's various "voices"--to bring to nature the assumption that the yelps of tortured animals, or the bloated bellies of floating fishes, or the blasted landscape of a clearcut forest offer moral commentary to those attuned to a wider discourse.

Language, according to many advocates, is too narrowly defined by human-centered criteria. In his chapter on sounds in *Walden*, Thoreau implies that the human language is but one dialect of many, and that nature speaks constantly in its own tongue: "But while we are confined to books, though the most select and classic, and read only particular written languages, which are themselves but dialects and provincial, we are in danger of forgetting the language which all things and events speak without metaphor, which alone is copious and standard" (*Walden and Other Writings* 101). Expanding the boundaries of acceptable definitions of communication, the nature writer argues that the natural world does indeed have the means for expressing a range of will and sentience, but that the criteria we apply will not allow us to recognize anything as language that is not human language.

Consequently, the nature advocate frequently challenges the existing definitions of language, offering alternative criteria for assessing linguistic behavior in an effort to extend language to non-human nature. Rather than demanding that animal vocalizations demonstrate intentionality before it can be considered language, the advocate attributes intent and purpose to animal communication and then fits observations of subsequent behaviors to confirm those speculations. In other cases, the advocates' notion of sentience is extended to nature at large, and the advocates attributes purpose or even a sort of collective consciousness to nature, testing those assumptions against their personal experiences of various natural systems. In other words, when brought to bear on observations, common sense and intuition lead the advocate to assume that animal gestures or physical phenomena are not purely arbitrary and that they mean something.

The nature writer will often apply inferential reasoning to observations in an effort to understand the function and motivation of nature's language. Beginning with the common sense notion that an exercise of voice proceeds from some internal motivation and that it is intended to convey something, the advocate works inductively towards the conclusion that the communicative behavior of non-human nature constitutes language. Frogs sing, says Abbey, "out of spontaneous love and joy." The validity of this intuited truth is tested against and supported by the advocate's experience of the world: "Has joy

any survival value in the operations of evolution? I suspect it does; . . . Where there is no joy there can be no courage" (*Desert Solitaire* 143).

Yet the advocate is solidly rooted in the material world, and he or she measures subjective impressions of nature against the realization that nature exists independent of and external to the observer. In *Desert Solitaire*, Abbey cautions: "I am not attributing human motives to my snake and bird acquaintances. I recognize that when and where they serve purposes of mine they do so for beautifully selfish reasons of their own" (23-4). Elsewhere, he attacks the notion that the external world is a creation of the mind, citing as evidence the fact that if you lob a rock at an avowed idealist he will necessarily duck. But trusting only in the empirical and quantifiable, warns Abbey, would also be a mistake: "I suggest, however, that it's a foolish, simple-minded rationalism which denies any form of emotion to all animals but man and his dog" (Abbey 24). Building upon this premise, the advocates assume that the behaviors of other species are motivated by conscious intent, and then they seek to discern intent in nature's various forms of expression. The alternative--of dismissing a priori anything that did not demonstrate patently intelligible motives--condemns all but human language to be nothing more than physical phenomena or biological reflex. For instances, Le Guin points out that in studies of language acquisition in apes, "if the ape is not approached as a grammatical subject, failure of the experiment is guaranteed" (157).

However, as Dillard notes (tongue in cheek) a too literal interpretation of the advocate's project to comprehend nature's language yields an absurd perspective on advocacy. Returning to "Teaching a Stone to Talk," the island eccentric, Larry is like the nature advocate in that he is trying to re-invest nature with voice, with meaning. The man has a stone, says Dillard, that he keeps in a leather pouch. At times he takes it out and performs a ritual, unknown to all, to teach the stone to talk: "For this purpose he has not, as some have seriously suggested, carved the stone a little mouth, or furnished it in any way with a pocket of air which it might then expel" (*Teaching a Stone to Talk* 86). Those who seek to interpret nature's "language," Dillard seems to be saying, are not so much interested in discovering with instruments and empirical observation irrefutable evidence that chimp communication, for instance, does in fact conform to our criteria for language, albeit encoded in chimpanese. "I do not think," muses Dillard, "he expects the stone to speak as we do, and describe for us its long life and many, or few, sensations" (*Teaching a Stone to Talk* 86). Dillard suggests, as have other nature writers, that the advocate seeks to understand the voice of nature on its own terms--to shift the criteria of perception and comprehension altogether.

In an extended analogy, Dillard compares the chore of interpreting nature's language to translating a foreign language. As a child she had naively assumed that French was merely a code for English, and that at base all languages were English, but dressed in

other sounds or letters. She recounts that she had held firmly to the notion that there was a key out there to the encoded language, and all she had to do was learn it in order to decode all the gibberish she heard directly and immediately into English: "On the first day of my first French course, however, things rapidly took on an entirely unexpected shape. I realized that I was going to have to learn speech all over again, word by word, one word at a time--and my dismay knew no bounds" (*Pilgrim at Tinker Creek* 104-5). By applying human linguistic criteria to nature, we are often guilty of a sort of Dr. Doolittle fallacy, where we believe that animals are really speaking human language but in code. But the nature advocate seeks to dissuade us of that illusion, arguing instead that we begin from the ground up, learning nature's words and nature's grammar rather than appending it to our own. "We need someone to unlock the code of this foreign language and give us the key"; muses Dillard: "we need a new Rosetta stone. Or should we learn, as I had to, each new word one by one?" (*Pilgrim at Tinker Creek* 106). Dillard answers her own question in the affirmative. In seeking to decode the language of nature, we need to assume that nature has its own grammar or grammars, and that we must accept its rules and lexicon:

[W]e have been as usual asking the wrong question. It does not matter a hoot what the mockingbird on the chimney is singing. . . . The real and proper question is: Why is it beautiful? . . . Beauty itself is the language to which we have no key; it is the

mute cipher, the cryptogram, the uncracked, unbroken code. And it could be that for beauty, as it turned out to be for the French, that there is no key, that 'oui' will never make sense in our language but only in its own, that we need to start all over again, on a new continent, learning the strange syllables one by one. (*Pilgrim at Tinker Creek* 106-7)

For Dillard, nature's language may be based on an entirely different principle like some natural aesthetic, while we--chasing our own fancies--try diligently to force it to conform with human semantics. In their attempts to understand the language of nature, the advocate is willing to "start all over again," even on an entirely new linguistic "continent" if need be.

Aldo Leopold describes how, in lieu of an intelligible language, he is able to comprehend what communication nature offers. In many instances he extends the boundaries of language to include a variety of non-linguistic forms of communication. Watching his dog track game with his nose, the nature writer admires an interpretive skill unknown to the human species. Yet despite the foreign nature of the modes of inscription and methods for decoding, this non-human dialogue is nevertheless language to Leopold. He follows the confident dog as it reads the signs, scents, and markings created by its quarry: "Now [the dog] is going to translate for me the olfactory poems that who-knows-what silent creatures have written in the summer night" (Leopold 46).

To the advocate, the voice of nature is not necessarily limited to an audible expression. "Like people," observes Leopold, "my animals frequently disclose by their actions what they decline to divulge in words. It is difficult to predict when and how one of these disclosures will come to light (Leopold 83). Edward Abbey, among others, shares this opinion. In his accounts of Moab, Abbey translates with a proficiency born of familiarity the language of one of the desert's more visible residents. Coming across the tracks of a lone coyote, Abbey follows the trail past a spring: "Under the juniper he has left two gray-green droppings knitted together with rabbit hair. With fingertip I write my own signature in the sand to let him know, to tip him off; I take a drink of water and leave" (*Desert Solitaire* 37). The coyote's signature or writing is his scat. And like the animals that designate their territory or their comings and goings with scent or sign, Abbey inscribes on the landscape his own claim to the territory. Significantly, the two acts are set next to each other, two parallel declarations in alternate dialects.

Plants, too, have something to communicate to those familiar with their lexicon. On several occasions in *A Sand County Almanac*, Aldo Leopold interprets the language of the trees or of plants for his readers. The wild silphium near his Wisconsin farm represented "a remnant of the native prairie," a living relic from an age when "thousands of acres . . . tickled the bellies of the buffalo." Upon seeing the last of the indigenous prairie

silphium cut by a road crew, Leopold likens the plants to "history books" and despairs that most of us are oblivious to the tales they tell:

The Highway Department says that 100,000 cars pass yearly over this route during the three summer months when the Silphium is in bloom. In them must ride at least 100,000 people who have "taken" what is called history, and perhaps 25,000 who have "taken" what is called botany. Yet I doubt whether a dozen [out of 100,000] have seen the Silphium, and hardly one will notice its demise. If I were to tell a preacher of the adjoining church that the road crew has been burning history books in his cemetery, under the guise of mowing weeds, he would be amazed and uncomprehending. How could a weed be a book? (49)

Even inanimate nature has a language of its own. Leopold describes the satisfaction he got out of "reading" the history inscribed on old boards: "The autobiography of an old board is a kind of literature not yet taught on campuses, but any riverbank farm is a library where he who hammers or saws may read at will. Come high water, there is always an accession of new books" (27). In this case, the linguistic medium of nature is not speech but writing. To the educated eye, the boards serve as a collaborative palimpsest, authored initially by nature in the form of the tree, writ over by the human language of saw and plane and hammer, and finally erased and inscribed again by water,

wind, and weather. To the astute interpreter, this simple "text" provide clues to understanding humanity, nature, and humanity's relationship to the natural world.

However, in translating nature's wordless refrain into language, the advocate is inevitably caught in what can be called the "paradox of substance." In his essay "Nature as Text," David Cratis Williams examines the paradox of substance that arises when language is used to represent the world. In this paradox, "a thing or idea is 'known' only in relation to that which it is not. Burke's discussion of the term 'substance' in *A Grammar of Motives* vivifies the posit: while the idea of 'substance' is generally something along the lines of identifying what something's 'essence' 'is,' it literally means to stand beneath--sub-stance--or outside of what the thing or idea 'is'" (Williams 330). Our words and the things they represent are not the same thing, and for this reason we are perpetually separated from the object of our intellectual attention.

The act of making meaning is a matter of dealing with metaphors and not with the object itself. As soon as language is in place to facilitate our perception of the world, it intercedes between us and the object of our perception. Language impedes immediate experience, transforming the silent present to the present recollected through words. Language stands between observer and observed, like "the noise of useless interior babble," complains Dillard, "that keeps me from seeing just as surely as a newspaper dangled before my eyes" (*Pilgrim at Tinker Creek* 32). While the nature advocate strives

to attribute language to non-human nature, the language they identify at once fulfills and denies their aspirations. Once the howl of the wolf is translated into "defiant sorrow," it is meaningful, but it is no longer the expression of a wild animal but the impressions of the romanticist.

Listening to the western grebe whistle a warning to its neighbors, Leopold wonders what the bird might be communicating:

I have never been able to guess, for there is some barrier between this bird and all mankind. One of my guests dismissed the grebe by checking off his name in the bird list, and jotting down a syllabic paraphrase of the tinkling bell: '*crick-crick*,' or some such inanity. The man failed to sense that here was something more than a bird-call, that here was a *secret* message, calling not for rendition in counterfeit syllables, but for translation and understanding. Alas, I was, and still am, as helpless to translate it or to understand it as he. (Leopold 170)

The nature writer can interpret and translate the voice of the wild, suggests Leopold, but those translations are always going to be removed from the "secret" meaning behind the language. The idea used to identify a thing's essence or substance remains outside what it "is."

The advocates are caught between their desire to know nature unmediated and their recognition that they must always return to language to give aesthetic, spiritual, or logical

significance to their experiences. "Seeing," admits Dillard, "is of course very much a matter of verbalization. Unless I call attention to what passes before my eyes, I simply won't see it" (*Pilgrim at Tinker Creek* 30). Language, then, does not make the world, but makes the difference between passive sensation and an active awareness of the world. By giving us a method of symbolizing experience, language allows us to reflect, associate, and evaluate. The ability to see, as Dillard and other advocates can attest, is intensified and improved by the ability to describe what's seen. When considering the relationship between the nature experience and verbalization, Scott Slovic notes that "The poet's craft enables him to control and encapsulate experience" (174). From this perspective, the crucial factor which gives the nature experience its special quality is the observer's language.

The advocates do not harbor a naive belief that their interpretation of nature's language constitutes some ideal strategy for apprehending the absolute essence of nature (though they might wish it were possible), but they suggest that their approach is a *better* way to apprehend nature. Leopold, Abbey, and Dillard and other advocates share the belief that, as with human communication, it is possible to achieve an imperfect though effective understanding of nature's language. However, those like Leopold's friend who hear in bird song only a meaningless "tinkling bell" act under the assumption that no understanding is possible because there is nothing to be understood. There is, to those

who reject the possibility that nature possesses a language, only stimulus and response, only mechanical mouthings. The consequences of perceiving nature as dead matter and disregarding its language and signs as meaningless have been devastating, as human conduct towards nature has largely been guided by what is expedient for human life rather than what is good for all life. For the writers discussed here, perceiving nature as animate and expressive seems correspond more closely with their experiences and, thus, has greater explanatory power. Attributing language to nature, then, is offered both as a more faithful representation of the natural world and an improved perspective for guiding human actions within the biotic community.

CHAPTER V

TRANSLATING THE LANGUAGE OF NATURE

The second characteristic of advocacy to be discussed here is the tendency among the nature writers examined to act as mediators or intercessors for nature. Once the advocate has, through the nature experience or some similar route to insight, interpreted nature's language, he or she must translate that understanding into intelligible discourse.

Translations of nature's language into human language generally take one of two forms: direct and indirect discourse. In what I am going to term "direct discourse," the nature writer sets out to convey nature's interests by representing nature as speaking directly to a human audience. This approach, which is often a component of (though by no means limited to) poetry or fiction, usually involves a didactic address from a non-human character such as a coyote, raven, or mountain. On the other hand, in what may best be described as "indirect discourse," nature's voice or intent is expressed through the advocate. In this case, the nature writer speaks in her own voice, but in such a way that her speech simultaneously conveys nature's meaning.

5.1 Advocacy's Double-Voiced Discourse

At this point, the theories of Mikhail M. Bakhtin can provide some valuable insight towards understanding the dynamics of "double-voiced" or refracted language. In his essay "Discourse in the Novel," Bakhtin describes how traditional stylistic or ideological analyses often ignored or suppressed the multifaceted quality of discourse in the novel.

When confronted with a genre like the novel which involves authentic depiction of the "language of everyday life," traditional literary criticism could only reduce the great variety of language to an abstract linguistic monolith. Too often, says Bakhtin,

the discourse of artistic prose was either understood as being poetic in the narrow sense, and had the categories of traditional stylistics (based on the study of tropes) uncritically applied to it, or else such questions were limited to empty, evaluative terms for the characterization of language, such as "expressiveness," "imagery," "force," "clarity" and so on. (260)

Scholars of the novel who applied the rules of poetic stylistics, which assume "the unity of the language system and the unity (and uniqueness) of the poet's individuality," inevitably "select[ed] from the novel . . . only those elements that [could] be fitted within the frame of a single language system and that express, directly and without mediation, an authorial individuality in language" (Bakhtin 265). But as Bakhtin points out in his essay, the novel is comprised of "a diversity of social speech types (sometimes even diversity of languages) and a diversity of individual voices, artistically organized" (262).

The diversity of language and the subsequent internal stratification of discourse within the novel are evidence of what Bakhtin characterizes as the "heteroglot" nature of language. Heteroglossia is the condition of contextuality which informs the meaning of every utterance. For every word there is what Michael Holquist (Bakhtin's translator)

describes as a "matrix of forces"--be they social, political, physiological, etc.--which inform the meaning of that word in any particular instance (Bakhtin 428). The contextual or "centripal" component of language opposes the unitary or "centrifugal" pressures to homogenize and unify language. Within the genre of the novel, the author is able to make use of heteroglossia through "a combining of languages and styles" which results in "a distinctive social dialogue among languages" (Bakhtin 263).

In much the same way, the nature writer draws upon the heteroglot nature of language in constructing a rhetoric of advocacy. The act of speaking for nature, in which the voice of one is mediated through another, necessarily involves parody, stratification, and diversity. "Heteroglossia," observes Bakhtin, "once incorporated into the novel (whatever the forms for its incorporation), is *another's speech in another's language*, serving to express authorial intentions but in a refracted way. Such speech constitutes a special type of *double-voiced discourse*. It serves two speakers at the same time and expresses simultaneously two different intentions: the direct intention of the character who is speaking, and the refracted intention of the author" (324). Like the novelist who creates the voice of a fictional character, the advocate is also employing double-voiced discourse in creating a voice for nature. Nature's direct address to a human audience carries the refracted intention of the nature writer. For instance, in Ursula Le Guin's short story "Buffalo Gals," Chickadee, worried about human encroachment on the wilderness, tells

the young girl "They [humans] weigh down our place, they press on it, draw it, suck it, eat it, eat holes in it, crowd it out. . . Maybe after a while longer there'll only be one place again, their place. And none of us here" (43). The animal speaker articulates its fear of humanity's destructive power, but it also carries with it Le Guin's admonition to her readers against willful ecological destruction. Likewise, the advocate's indirect representation of nature in his or her own voice serves the interests (albeit *purported* interests) of nature. Thus, when Leopold describes his guilt and complicity at seeing "a fierce green fire" die in the eyes of a wounded wolf, he simultaneously expresses nature's basic desire for self-preservation.

5.2 Representing Nature's Voice: Direct Discourse

Of the two methods of translating nature's meaning--direct and indirect--, both involve a degree of double-voicedness. When representing nature's voice through direct discourse, the nature advocate depicts nature as speaking unmediated to a particular audience, much in the way that a novelist might depict a character engaged in what Bakhtin calls "direct dialogue." Direct dialogues, explains Bakhtin, occur in instances where the author professes to register "the direct speeches of his characters" (316). In instances of direct discourse in nature writing, the advocates attempt to textually remove themselves from the intermediary position, suggesting that the voice comes directly from

nature. In these cases, it is nature's voice that is primary and the author's interests that are implied. The author may participate in the communication as a detached narrator, but the appeals from nature are made directly to a human character or to the reader.

Direct discourse in which the character appears to speak unmediated is, by necessity, mediated in that a human translator is always the mouthpiece. Similarly, "The speaking person and his discourse in the novel," notes Bakhtin, "is an object of *verbal* artistic representation. A speaking person's discourse in the novel is not merely transmitted and reproduced, it is, precisely, *artistically represented* and thus--in contrast to drama--it is represented *by means of* (authorial) *discourse*" (332). In the rhetoric of advocacy, the character speaks directly to a human audience, but its language is artistically represented using the grammar, syntax, or vocabulary of human language. Like the author in the novel, the advocate stands outside the text, and nature is depicted as an autonomous speaking subject. As in the case of translation, the audience realizes that the language they are hearing is not the authentic language of the speaker, but a fair representation of the speaker's intentions in an entirely new medium. The advocate who uses direct discourse attempts to present at least the appearance of conveying nature's meaning, unadulterated, to the audience.

Many American nature writers have represented the speech of non-human nature in poetry and prose as if it were a direct rendering of nature's voice. In this tradition, the

writer often creates a character or chorus that embodies the qualities of a sentient and self-conscious Nature. In cases of advocacy, the animal or natural entity then speaks to the reader or to other characters about its emotional or physical state in an effort to secure some human consideration. Thomas Cole, a painter and poet associated with the Knickerbocker Group,¹¹ was one of the earliest American writers to advocate for nature by attributing language to the natural world. In the 1830s, he became greatly alarmed by the rapid pace of deforestation of New England's majestic coniferous and hardwood forests. Cole, like other American romantics, saw the American wilderness as a unique national treasure, in large part because the grandeur and scale of the wilderness was capable of eliciting an experience of the sublime. For Cole and others in the Knickerbocker Group, this experience of beauty tinged with terror had the effect of sharpening one's aesthetic and moral constitution. Nature was not merely an aggregate of form and color; in Cole's opinion it was an entity pervaded by spirit, and as such it was worthy of our moral consideration. Believing the very integrity of the American

¹¹The Knickerbocker Group got its name from Diedrich Knickerbocker, Washington Irving's fictional author of *A History of New York From the Beginning of the World to the End of the Dutch Dynasty*. James Fenimore Cooper, William Cullen Bryant, and Thomas Cole are most closely associated with the group, which was constituted mainly as a result of their close friendships. The Knickerbockers did not espouse any particular ideology, but they shared similar romantic sentiments regarding the sublimity and nobility of the American wilderness.

wilderness--and, by association, American morality--to be at stake, Cole wrote the "Lament of the Forest" to thrust nature's interests upon an indifferent public.

The poem begins with an ode to the incomparable majesty of Hudson's "beauteous mountains," clothed in "Forests of shadowy pine, hemlock and beech, / And oak and maple" (26-27). These green ranks stand "Peaceful and calm" like "A silent people through the lapsing years" (31-32). The speaker, overwhelmed by the lush trees, the sparkling waters, and the perfumed air is "Entranced in thoughts" (35) and lapses into a "sweet repose" (50). In this heightened state, the barriers to perception that separate the speaker from nature dissolve, and he is able to hear "the voice of the great Forest." The speaker describes the language of nature as an entirely different communicative medium, closer to music than speech:

Twas wild and strange; a voice
 As of ten thousand! Musical it was--
 A gush of richest concord, deep and slow;
 A song that filled the universal air! (53-56)

It is a compound voice, composed of the collective will of thousands of trees. Despite the alien mode of expression, the advocate feels an affinity for nature and is able to interpret the strange voice and translate it into human language.

Presented in quotation marks, the lament that follows is rendered as the forest's direct discourse to the speaker. The forest breaks its silence to the advocate specifically because of his unique powers of perception and sympathy:

Mortal, whose love for our umbrageous realms
Exceeds the love of all the race of man;
Whom we have loved; for who have opened wide
With welcome our innumerable arms;
Open thine ears! The voice that ne'r before
Was heard by living man, is lifted up,
And fills the air--the voice of our complaint. (60-68)

The linguistic distance between advocate and nature is bridged by an emotional intimacy born of familiarity and experience. As is characteristic of the role of advocate, the speaker suggests that he is able to interpret the language of nature because "love" or a qualitative view of nature heightens his awareness. The speaker's care and concern for the forest makes him the ideal advocate above most of his countrymen who tend to see the woods as either an asset to commerce or an impediment to settlement. In the "Lament of the Forest," the speaker purports to render a direct translation of nature's speech.

In cases of direct discourse, the work of advocacy is carried out by nature itself, which offers up a representative voice from its own ranks--a forest, a spider, a mountain--

to redress human offenses against the entire non-human community. In Cole's poem, the narrator introduces the lament, but the forest itself directs its "complaint" towards the speaker and humanity in general, enumerating the injustices that nature has suffered at the hands of the greedy and the ignorant since the beginning of human history:

[For thousands of years] all was harmony and peace; but Man
 Arose--he who now vaunts antiquity--
 He the destroyer--and in the sacred shades
 Of the far East began destruction's work.
 Echo, whose voice had answered to the call
 Of thunder or of winds, or to the cry
 Of cataracts--sound of sylvan habitants
 Or song of birds--uttered responses sharp
 And dissonant; the axe unresting smote
 Our revered ranks, and crashing branches lashed
 The ground, the mighty trunks, the pride of years,
 Rolled on the groaning earth with all their umbrage. (84-95)

The voice of the forest is distinctly different from the reverent awe expressed by the human narrator. Besieged by a voracious army of woodsmen and settlers, the trees deliver a message imbued with tragic resignation. As if composing an elegy to mark its

own passing, the forest catalogues the history of its rapid decline at the hands of uncaring humanity. The dialogue is distinctly double-voiced, presenting the forest's interests in self-preservation in the "artistically represented" (authorial) discourse of verse.

Direct discourse is also double-voiced in the sense that it presents, simultaneously, a human and a distinctively non-human point of view. In Cole's poem, the work of the axe brings prosperity and happiness to humanity, but pain and suffering to the non-human community. Even the birds and the wind feel sympathy for the toppled and "groaning" trees. As the poem progresses, human history is re-told from the perspective of the embattled forest, and what constitutes "progress" for humanity is perceived as a tragedy for the wilderness. While the forests of Europe fell, North America remained the "bright, virgin continent," says the voice, protected from the "roving race of Europe" by the wild Atlantic. Fearing their ranks would suffer swift destruction at the hands of the invading settlers, the trees appeal to hostile Winter to keep humanity at bay:

But impotent was the voice of our complaint:

He came! Few were his numbers at first, but soon

The work of desolation was begun

Close by the heaving main; then on the banks

Of rivers inland far, our strength was shorn,

And fire and steel performed their office well.

No stay was there--no rest. (172-77)

Even the great physical barrier imposed by sea and storm could not spare the American wilderness, and while the discovery was greeted with enthusiasm by Western civilization, it was dreaded by the forest which perceived the new human invaders as "crafty conquerors." Indeed, the settlers in the New World wasted no time in cutting the New England woods with maniacal vigor.

Direct discourse frequently involves ethical and emotional appeals since nature takes on greater moral significance as a speaking entity. The voice concludes by suggesting that protecting the remaining American forests constitutes not only a physical challenge for the nation, but a moral imperative. The immediate address facilitates a more intimate exchange, and the chorus of trees describes the various injustices that nature has suffered under human domination. The forest portrays itself as helpless victim before irreverent and merciless "human hurricane." As if pleading for mercy, the forest acknowledges that its precarious survival is now largely in the hands of humanity:

Our doom is near: behold from east to west

The skies are darkened by ascending smoke;

Each hill and every valley is become

An alter unto Mammon, and the gods

Of man's idolatry--the victims we. (190-94)

Rhetorically, direct discourse arranges an immediate exchange between persecuted and persecutor, making the audience feel more accountable to nature than had the address been given by a third party advocate. Claiming that the forest's destruction is immanent, the voice creates a disturbing vision of a world smoldering in the ruins of human greed. As presented by the persecuted trees, the forests' demise is depicted as a moral battle in which humanity must choose between despoiling nature's sacred temple and, in doing so, giving themselves over to "idolatry," or preserving the last remnants of a fragile and noble race.

While personification was a technique common to nineteenth-century romantics, in the hands of advocates the trope was employed with the specific intent of representing nature's interests as opposed to merely mirroring humanity. Thus, as the romantic movement gave way to realism, naturalism, and other modes of representing nature, personification persisted among advocates because it remained a useful means for communicating nature's needs. Within the twentieth century, writers like May Sarton, Michael McClure, James Welch, John Collins, Rudy Wiebe, Timothy Findley and Jack Schaefer continue the tradition of challenging humanity's mechanistic view of nature through the discourse of the speaking animal.¹²

¹²In *Not Wanted on the Ark*, by Timothy Findley, animals on the Biblical ark converse about their lot in the scheme of the universe and their relationships to humans but,

Even today, advocates like Ursula Le Guin continue to defend the environment by presenting nature's voice as a direct address to the reader. In Le Guin's short story "Direction of the Road," the author gives voice to an oak tree growing near a busy roadway. Written as an autobiography, the oak describes how in its early life as a sapling there were no cars or highways. But at the age of 132, the oak saw its first motorcar, and the tree disliked the "wretched little monster" because it made such a noise and fouled the air. More disturbing to the tree, the industrial age seemed to change humanity, making people short-sighted, rushed, and anxious. Now, humanity's existence is largely confined to the limits of the asphalt, observes the tree, as people rush along its artificial course with the "illusion that they are 'going somewhere'" (Le Guin 89). With its focus on "progress" and the pursuit of material well being, humanity has become alienated from the natural world, observes the old oak, wreaking havoc for all nature in its path:

Very few of the drivers bothered to look at me, not even a seeing glance. They seemed, indeed, not to see any more. They merely stared ahead. They seemed to believe that they were "going somewhere." Little mirrors were affixed to the front of

mysteriously, they are silenced. In John Collins's *His Monkey Wife*, the heroine is a chimp named Emily who falls in love with a British missionary, offering a compelling look at the ways in which humanity professes to differ from nature. James Welch's *Fool's Crow* includes the antics of a trickster raven, and in Rudy Wiebe's *A Discovery of Strangers*, the world is described from the perspective of wolves, caribou, deer and other

their cars, at which they glanced to see where they had been; then they stared ahead again. I had thought that only beetles had this delusion of Progress. Beetles are always rushing about, never looking up. I had always had a pretty low opinion of beetles. But at least they let me be. (Le Guin 89)

The title of the story, "Direction of the Road," serves as a refrain throughout the story to underscore the notion that the one-track thought process common to modern society--our self-absorbed anthropocentrism--prevents us from comprehending nature outside the human universe. The image of the one-track road simultaneously conveys the author's criticism of humanity's limited concept of nature and language. By defining language strictly in human terms, our investigations of the physical world run the same predictable course and reach the same inevitable conclusion: nature has nothing to say.

The story ends with a frantic driver crashing head-on into the tree. The seventy-two foot tree receives some damage to its trunk, and the driver is killed instantly.

Symbolically, the human drive for mastery of the world puts the species on a collision course with nature with catastrophic results. Humanity has the most to lose, the oak seems to say, as nature will ultimately go on. The tragedy was largely the result of

animals. All of these writers challenge the notion of humanity's exclusive hold on language as a means to recontextualize humanity's relationship to the natural world.

misperception. In its rush to construct an increasingly convenient and artificial world, humanity has neglected to see the impact of its actions on the organic, living world.

In "Direction of the Road," the oak, like the human advocate, argues for a new way of seeing that will allow the beetle-like drivers on the human road to Progress to "understand Relatedness" (Le Guin 91). The disappointment of the oak in Le Guin's story, carries with it refracted condemnation from the author. In the rhetoric of advocacy, the transparency of the human advocate is never total, and his or her subjective impressions are always linguistically present in the double-voiced discourse of representation. The language of advocacy is, after all, human, and the interests of nature take form only within the text of the author. The very format of a dialogue necessitates that nature be anthropomorphized, and the expressions of nature are overlaid with the emotional sentiments of the human advocate. The drive for self-preservation articulated by the oak (a trait exhibited by organisms throughout nature) may be the core contribution of the "speaker," but the emotion belongs primarily to the textually absent narrator/author.

From Bakhtin's perspective, the voice of the speaking character is the result of arbitration between author and character:

The area occupied by an important character's voice must in any event be broader than his direct and actual words. This zone surrounding the important characters of the novel is stylistically profoundly idiosyncratic: the most varied hybrid

constructions hold sway in it, and it is always, to one degree or another, dialogized; inside this area a dialogue is played out between the author and his characters--not a dramatic dialogue broken up into statement and response, but that special type of novelistic dialogue that realizes itself within the boundaries of constructions that externally resemble monologues. (320)

Whatever intent or meaning the advocate gleans from intimate contact with nature inevitably becomes imbued with her own beliefs and desires when translated into the highly dialogized format of character discourse. While different organisms exhibit characteristics of fear, pleasure, and aggression which correspond to human emotions, it is no more possible to determine the internal state of, say, a dolphin than it is to determine with certainty the emotions of another human. An interpretation of the interests of others will always carry with it the subjective impress of the interpreter. Thus, much in the way that character zones are highly dialogized in the novel, direct discourse in the rhetoric of advocacy is a hybrid construction which reflects the inclinations of nature and the judgements of the advocate.

5.3 Nature's Meaning Mediated: Indirect Discourse

Indirect discourse is double-voiced in much the same way as direct discourse, but with this approach the author's voice is primary and nature's interests are implied. In

most cases of advocacy, nature writers represent the language of non-human nature in this more subtle, indirect manner. Rather than depicting a forest, bird, or some facet of nature directly addressing a human audience, in indirect discourse the advocate speaks with his own voice while paraphrasing the language of nature. Nature is not depicted as its own advocate here, but the nature writer acts as surrogate or intercessor. And, as Bakhtin has demonstrated, the voice that a particular author or character adopts may indirectly convey the "hidden voice" of another character. In indirect discourse, the voice of nature is contained within the language of the advocate. Under these conditions, the language of the advocate resembles the parodic stylization of the novelist in which "the speech of another is introduced into the author's discourse (the story) in *concealed form*, that is, without any of the *formal* markers usually accompanying such speech, whether direct or indirect. But this is not just another's speech in the same 'language'--it is another's utterance in a language that is itself 'other' to the author as well" (Bakhtin 303). While it is the advocate's voice we hear, contained within that human voice is the "other" language of nature, as non-human perspectives and interests find expression through the advocate.

In many cases, the advocates identify so strongly with nature that their own experiences seem to double for nature's, and their responses to human exploitation convey both their own and nature's protests. These empathetic advocates address environmental degradation as if it were a very real threat to themselves. By being so intimately linked to

the community of nature, their objections and concerns are intended to reflect nature's own distress. Implicit in the advocate's condemnation of the wasteful ways of human society is an injunction on behalf of nature against its continued exploitation.

Natty Bumppo, James Fenimore Cooper's wilderness hero, is a good example of the empathetic advocate. His affinity with the wilderness causes him to feel great distress at the senseless destruction of nature. Like real-life advocates, the fictional advocate, Natty, gives voice to nature by expressing his dismay and anger at humanity's careless destruction of nature. A lifelong frontiersman, Natty lives in intimate contact with the wilderness. Being free from the corruptive influences of society has sharpened his innate sense of good and evil and endowed him with rustic intelligence. In effect, Natty's relationship to nature is more like that of an animal, living simply, moving freely, accumulating little. The frontiersman's simple and unfettered lifestyle stands in stark opposition to the settlers' avarice and violence.

Leatherstocking derives his morals from observing the simple order exhibited by nature. After watching the dull-witted settlers chop down the lone tree on the vast prairie to feed their fire, Natty surmises that the human race in general is attuned only to its own selfish needs. Later, he speculates that the whole treeless region may have been denuded by humanity. Leatherstocking explains to the skeptical Doctor Obed Bat that the pride and waste of wicked empires ultimately could have reduced the land to desert. "This very

spot of reeds and grass, on which you now sit," says Natty, "may once have been the garden of some mighty king" (*The Prairie* 279).

Considering that humanity tended to shape the world in its own image, Natty concludes that the treeless plains may bear the scars of humanity's moral failings. To one so skilled in reading natural phenomena, the whole of nature becomes an indicator of the relationship between humanity and nature. By its very health or demise, speculates Natty, nature is capable of expressing a sort of valuative commentary on human conduct. The environment responds with approval to Natty's simple, harmonious living by meeting all his material needs. By contrast, declining animal populations, decimated forests, barren plains, and the atrophy of the wilderness, on the other hand, are physical testament of nature's disapproval of settlers' "wasty ways."

Part of Natty's diatribe's against the destructive settlers stems from Cooper's nostalgia for the American wilderness. When Cooper began the Leatherstocking series in 1823 with *The Pioneers*, the American frontier was being settled at an incredible pace. For Cooper and others, the American vast wilderness represented a source of intense national pride. Where Europe had the accoutrements of civilization, architecture, arts, urbanity, etc., America had its wilderness. For Cooper, the sublime majesty of the wilderness had an ennobling force which could purify the young nation of all the artifice and vanity of the Old World and give Americans, if they were attuned to the lessons of nature, moral

lessons with which to guide individual and social conduct. Hence, the destruction of the wilderness was perceived by Cooper as the outward manifestation of moral deficiencies among the public that threatened to undermine the realization of a new Golden Age in America. Cooper saw society's moral destiny intimately interconnected with the fate of the wilderness, and speculated that throughout human history the destruction of nature had precipitated the fall of nations.

In *The Pioneers*, Leatherstocking condemns the townspeople for their ruthless destruction of helpless passenger pigeons. As with other real life advocates, this fictional character indirectly represents the interests of nature, seeking its preservation and well-being against the selfish pursuits of humanity. When migrating flocks of the birds pass over the area, settlers pull every firearm and projectile from the family arsenals to slaughter the birds. At one point, Mr. Jones fills a canon with birdshot and blows hundreds from the air with every shot. Appalled, Natty speaks for the decimated flock:

This comes of settling a country!; . . . here have I known the pigeons to fly for forty long years, and till you made your clearings, there was nobody to skear or to hurt them. I loved to see them in the woods, for they were company to a body; hurting nothing; being, as it was, as harmless as a gartersnake. But now it gives me sore thoughts when I hear the frighty things whizzing through the air, for I know it's only a motion to bring out all the brats in the village. Well! the Lord won't see the waste of

his creatures for nothing, and right will be done to the pigeons, as well as others, by and by. (*The Pioneers* 341)

The settlers inject chaos and disharmony into a world that, for forty years, had been a peaceful haven for both Leatherstocking and the pigeons. The harmony that both the frontiersman and the birds enjoy is shattered by the pointless violence of the disrespectful townspeople. Living so closely to nature and enjoying the fellowship of other creatures, Natty experiences the slaughter of the helpless birds as an act of hostility towards himself.

No longer transparent (as in direct discourse), the advocate who represents nature's language through indirect discourse is overt about the role of spokesperson. Natty condemns the settlers for "firing into God's creatures in this wicked manner" and he gives Judge Marmaduke a lesson in the ethical obligations that humanity owes to nature. Framed within the context of Christian notions of stewardship, Natty's defense of the wilderness is founded on the assumption that nature possesses dignity and value as a component of creation:

Put an ind, Judge, to your clearings. Aint the woods His work as well as the pigeons? Use, but don't waste. Wasn't the woods made for the beasts and birds to harbor in? and when man wanted their flesh, their skins, or their feathers, there's the place to seek them. But I'll go to the hut with my own game, for I wouldn't touch one of the

harmless things that cover the ground here, looking up with their eyes on me, as if they only wanted tongues to say their thoughts. (*Pioneers* 343-44)

Natty turns his back on the slaughter and retreats into the sheltering woods. Like the harried pigeons, the rustic frontiersman feels acutely persecuted by the incursions of the unprincipled settlers. Declaring his allegiance to the wilderness and its creatures, Natty speaks for the dead and scattered birds and all those who "only wanted tongues to say their thoughts." Here, Natty announces that his speech is double-voiced. Gazing into the eyes of the wounded birds, Natty perceives terror, desperation, and confusion, and those sentiments clearly motivate every word of his rebuke of the cruel mob.

Natty espouses an ethic of reverence, frugality, and fairness which favors humanity's integration into the natural world over its conquest and manipulation of nature. Whereas the actions of the settlers are "wicked" and "wasty," the old hunter is motivated to sustain himself without devastating the environment that provides his living. Sounding like the representative for wolf in the Oneida legend, Natty weighs his desires against the needs of nature in order to discern an ethical course of action. "When I want such a thing," says Natty, "I go into the woods till I find one to my liking, and then I shoot him off the branches, without touching the feather of another" (*Pioneers* 342). The villains in Cooper's frontier tales are often the most ruthless towards nature. "Pioneers who wastefully slash the forest and its creatures," observes environmental historian Roderick

Nash, ". . . occupied the lowest position in Cooper's elaborate social scale. Leather-stocking, on the other hand, was the ideal pioneer because he honored the wilderness and used it respectfully" (Nash 76-77).

Cooper was eerily prophetic in projecting the demise of the passenger pigeon. Whereas the fictional Natty spoke in defense of the endangered birds, it falls to the real-life advocate, Aldo Leopold, to write the species's obituary. Acting as a self-appointed representative, Leopold relays the significance of the loss to nature in common terms to an audience who, in general, saw nature's workings as alien and inscrutable. *In A Sand County Almanac*, Leopold demonstrates how humanity's careless indifference impacts nature using the extreme example of the extinct passenger pigeon. Based on his experience of nature's general drive for survival, Leopold explains how humanity frustrated those desires, emphasizing how the pigeons, like human beings, "loved" life:

The pigeon loved his land: he lived by the intensity of his desire for clustered grape and bursting beechnut, and by his contempt of miles and seasons. Whatever Wisconsin did not offer him gratis today, he sought and found tomorrow in Michigan, or Labrador, or Tennessee. His love was for present things, and these things were present somewhere; to find them required only the free sky, and the will to ply his wings. (119)

In authorial speech which is double-voiced, observes Bakhtin, it is common to discern "an intrusion of the emotional aspects of someone else's speech into the syntactic system of authorial speech" (319). Similarly, in indirect discourse the appeals of the advocate are often shaped by perspectives and sentiments not their own. The "intensity of [the pigeon's] desire for clustered grape" and its perseverance to pursue those pleasures across a continent signal to Leopold a clear expression of "will" and passion. Speaking in his own voice, Leopold expresses this basic impulse of all life forms towards self-preservation with a metaphor which his audience could appreciate--"love." In this way, the interests of nature, as conveyed to the advocate through various non-linguistic means, are represented in human speech to a human audience.

At the most fundamental level, indirect discourse allows the advocate to promote the perceived interests of nature, representing in his own voice everything which he apprehends through experience and intuition. On one excursion, Leopold's impressions of the busy animal inhabitants of a local marsh compel him to defend this under-appreciated ecosystem against increasing human incursions. Lying on his stomach, "prone, in the muck of a muskrat house," Leopold sees a redhead duck and her "convoy of ducklings," a Virginia rail, a pelican, a mink, and female grebe bearing "two pearly-silver young" upon her back. This thriving community and many like it are destroyed on a regular basis to make room for more "productive" farmland:

The marshlands that once sprawled over the prairie from Illinois to the Athabasca are shrinking northward. Man cannot live by marsh alone, therefore he must needs live marshless. Progress cannot abide that farmland and marshland, wild and tame, exist in mutual toleration and harmony.

So with dredge and dyke, tile and torch, we sucked the cornbelt dry, and now the wheatbelt. Blue lake becomes green bog, green bog becomes caked mud, caked mud becomes a wheatfield. (Leopold 172)

Recognizing that development of such areas would deny him the enjoyment of hunting and experiencing the wildlife, Leopold seeks to curb destructive agricultural practices. More importantly, he realizes that the creatures that depend on the marsh--the mothers nurturing their young, the muskrat and mink who make their homes there--are displaced or eradicated with the destruction of the wetlands. Suggesting that a compromise is possible between humanity and nature, Leopold puts forth the idea that we reject the imperative for "progress" and allow wild and tame "exist in mutual toleration and harmony." In condemning the developers' impulse to "dredge and dyke, tile and torch" every wetland, Leopold serves his own needs as a wildlife enthusiast and, indirectly, voices the interests the wetland creatures have in maintaining their own existence.

Like Leopold, Edward Abbey opposed rampant development, and he often spoke out against human activities which would jeopardize the integrity of the fragile desert

environments of the American West. In *Desert Solitaire*, Abbey's observations of nature frequently harbor the implied voice of the wilderness. In one case, the writer describes his impressions upon leaving his beloved desert in such a way that gives voice to both his own and nature's impressions of the event. Abbey begins in his own point of view, examining the feelings and associated images he experiences as a result of his departure. Describing the beauty of the landscape with unveiled sentiment, Abbey bids a sad goodbye to Moab:

In the government truck I make a final tour of the park. East past the Balanced Rock to Double Arch and the Window. . . . My own, my children, mine by right of possession, possession by right of love, by divine right, I now surrender them all to the winds of winter and the snow and the starving deer and the pinyon jays and the emptiness and the silence unbroken by even a thought. (*Desert Solitaire* 300)

Under the influence of his own emotions, Abbey recognizes that it would be easy to attribute human desires to nature:

I am almost prepared to believe that this sweet virginal primitive land will be grateful for my departure and the absence of tourists, will breathe metaphorically a collective sigh of relief--like a whisper of wind--when we are all and finally gone and the place and its creations can return to their ancient procedures unobserved and undisturbed by the busy, anxious, brooding consciousness of man.

Grateful for our departure? One more expression of human vanity. (*Desert Solitaire* 300)

Making a conscious effort to suppress his own perspective, that "human vanity" which anthropomorphizes all, Abbey speaks for nature, offering its distinctively different perspective on his departure:

The finest quality of this stone, these plants and animals, this desert landscape is the indifference manifest to our presence, our absence, our coming, our staying or our going. Whether we live or die is a matter of absolutely no concern whatsoever to the desert. (*Desert Solitaire* 300-301)

No longer presented from his own biased frame of reference, human actions lose all the monumental emotional and moral import we ascribe to them. It is a human tendency, Abbey notes throughout his writings, to see the entire universe as revolving around and dependent upon human endeavors. Nature's perspective, he suggests, is distinctly free of such assumptions. The alternative and external perspective of Abbey's departure provides a marked contrast to his own: nature feels "indifference" instead of "relief," and rather than being "grateful" for the absence of humanity nature feels "absolutely no concern" for our existence.

The presence of nature's voice can be marked both by a shift in perspective and a shift in language. As Abbey continues his description of the desert's view of humanity,

nature's perspective is rendered as stylistically distinct from his own sentiments. While the speaker is at all times Abbey, the language changes to accommodate the implied voice of nature.

Whether we live or die is a matter of absolutely no concern whatsoever to the desert. Let men in their madness blast every city on earth into black rubble and envelope the entire planet in a cloud of lethal gas--the canyons and hills, the springs and rocks will still be here, the sunlight will filter through . . . [and] living things will emerge and join and stand once again. (*Desert Solitaire* 301)

The emotionally charged tone of the advocate co-exists with the indifferent perseverance attributed to nature. To Abbey, humanity's conduct towards nature is reprehensible. Human destruction of the environment is "madness" in which we stupidly and rashly propel civilization to a pile of "rubble." But framing this bitter outburst--which is distinctly Abbey's voice--is the emotionless tone of an indifferent nature. The desert "will still be here," says Abbey, and, unfazed even by annihilation, it will go about its business and quietly "emerge and join and stand once again." There may be no formal distinction like quotation marks to set the voices off from one another; nevertheless, in the rhetoric of advocacy it is possible to discern the voice of nature--demarcated by a distinct point of view, set of interests, or rhetorical traits--within the speech of the advocate. Like the "double-voicedness" Bakhtin identifies in authorial discourse where multiple languages

can be present in one, Abbey's speech is a hybrid, composed of two distinctive voices. Such a "double-accented, double-styled hybrid construction" consists of "an utterance that belongs, by its grammatical (syntactic) and compositional markers, to a single speaker, but that actually contains mixed within it two utterances, two speech manners, two styles, two 'languages,' two semantic and axiological belief systems" (Bakhtin 304). In the broadest interpretation of Bakhtin's axiom, "two 'languages'"--nature's and humanity's--become "mixed" within the utterance of a single speaker, the advocate.

In both direct and indirect representations of nature's language, the advocate is stretching the capacity of language to the point of redefining it. In blending their own perspectives with that of external nature and by merging their own voices with languages entirely other than their own, nature advocates simultaneously challenge linguistic egocentrism while re-drawing the boundaries of language altogether. Just as the parodic stylization of the novel represents a challenge to the myth of a unified language, the dual-accented rhetoric of advocacy interjects multiplicity, stratification, and paradox into our notion of our linguistic uniqueness:

A comic playing with languages, a story 'not from the author' (but from a narrator, posited author or character), character speech, character zones and lastly various introductory or framing genres are the basic forms for incorporating and organizing heteroglossia in the novel. All these forms permit languages to be used in ways that

are indirect, conditional, distanced. They all signify a relativizing of linguistic consciousness in the perception of language borders--borders created by history and society, and even the most fundamental borders (i.e., those between the languages as such)--and permit expression of a feeling for the materiality of language that defines such a relativized consciousness. . . . Prose consciousness feels cramped when it is confined to only *one* out of a multitude of heteroglot languages, for one linguistic timbre is inadequate to it. (Bakhtin 323-24)

The dominant scientific paradigm refuses to admit intuition and experience as valid forms of interpretation and rejects nature's non-linguistic expression as valid language. In giving voice to nature, the advocate subverts our rigid definitions of language and insists on peopling the text of human discourse with talking forests, indifferent deserts, and doleful pigeons. Like the disruptive discourse of the novel, the rhetoric of advocacy ignores--erases even--the "fundamental borders" of language in order to re-draw them. This, to borrow a concept from Bakhtin, is the "relativizing of linguistic consciousness" that advocates accomplish by speaking for nature. By appending nature's language to their own, or by suggesting that the two disparate modes of expression are compatible, the advocate asserts that human discourse is essentially no different from the language of bird, the trees, or the mountains. Or, conversely (and simultaneously), that language itself

is so various and multiform as to resist unifying, homogenizing, and exclusionary impulses.

CHAPTER VI

BROKERING POWER TO NATURE

Up to this point I have discussed how the advocate interprets nature's language and how those impressions are translated into intelligible discourse. But one could argue that poets, scientists, theologians, and others have also concerned themselves with interpreting nature. Does this, therefore, make all who translate the phenomena of the physical world advocates for nature? The act of interpretation alone does not sufficiently distinguish advocacy from other forms of rhetoric which involve mediation. We need a way to discern between speaking *about* nature and speaking *for* nature. One of the most striking characteristics of this rhetorical strategy is that, unlike other forms of nature writing, advocacy facilitates a transfer of power to nature. Rather than merely using nature to mirror human concepts, the advocate seeks to arbitrate between competing values and influence the conduct of human affairs for the benefit of nature. To accomplish these goals, the advocate alters the relations of power between speaker, audience, and subject, re-constituting nature as a partner in human discourse rather than the object of linguistic and physical manipulations.

6.1 The Rhetoric of Advocacy: Brokering Power

Defining advocacy simply as rhetoric which gives voice to voiceless nature admits a whole spectrum of discourses which are not acts of nature advocacy. For example, talking animals are quite common in the world of literature and myth. While most people generally believe that nature is, in reality, incapable of language, that does not prevent various writers from using animals or nature as a symbol for concepts, people, or human attributes. In myths, animal fables, folk tales, and a variety of other literary genres animals have been talking for centuries. In Aesop's fables, dogs, lambs, lions and a whole community of animals talk to one another; the creation myths of the Maidu of northern California incorporate the antics of a witty coyote and a thoughtful turtle; Chaucer's Chauntecleer talked his way out of becoming the fox's dinner; Swift's Houynynms held great intellectual discussions that far exceeded Gulliver's capabilities; and Orwell's farm animals plan and implement a political revolt. The list could go on and on.

Neither is the practice of "reading" nature's signs all that new. Many observers of natural phenomenon throughout the ages have claimed to have special powers to discern the "language" of nature. In America alone, interpreters and translators of natural phenomena have been "reading" from the book of nature from the first days of settlement. The Puritans believed that events in nature were never superfluous, and that the workings of the physical universe were an extension of God's will. For instance, Winthrop

interpreted the death of a neighbor's cow as an expression of divine displeasure, storms and natural disasters were seen by clergy as the Lord's retribution, and still births or deformities were regularly interpreted as signs of condemnation or punishment. Sailors, hunters, farmers, and a host of Americans who made their living close to nature have claimed to possess special ability to read the mysterious signs of nature. And there is no shortage of scientists, mathematicians, and astronomers who boast about their abilities to unlock the secrets of the universe through observation and interpretation.

Under the impression that advocacy is merely an act of translation, one might be tempted to argue, for example, that natural theology constitutes advocacy. Natural theology and advocacy do share some characteristics. After all, the Puritans often interpreted and translated the language of nature, incorporating those impressions of the wilderness in sermons which were expressly rhetorical in their aims. The goal of so many of the Puritan clergy is to change the actions or attitudes of their audience by relaying signs from nature. In his *Personal Narrative*, Jonathan Edwards¹³ describes how

¹³In Chapter II, I focused mainly on discussing the ways in which the Puritans described nature as a hostile frontier. But, as noted in that chapter, the wilderness was also perceived as the promised land, and some Puritan literature exhibits aspects of the pastoral tradition. Edwards is a good example of a Puritan who represented nature as a bountiful garden, and, in keeping with his natural theology, he believed nature to be a conduit of God.

contemplation of nature facilitates his experience of "the glorious majesty and grace of God":

God's excellency, His wisdom, His purity and love, seemed to appear in everything in the sun, moon and stars; in the clouds, and blue sky; in the grass, flowers, trees; in the water, and all nature; which used greatly to affix my mind. I often used to sit and view the moon for a long time, and so in the daytime spent much time in viewing the clouds and sky to behold the sweet glory of God in these things. (60)

The physical world is, for Edwards, an extension of the Creator, and as such can be a catalyst for religious experience. In his formative years and thereafter, nature provided Edwards with moral and spiritual guidance, and the minister presents the glories of nature to his congregation as evidence of the power and beauty of God. Like advocacy, such rhetoric involves an interpretation of the language of nature with the explicit intent to persuade.

But reading nature as a sign from God is not an act of advocacy. The interpreter, in this case, sees nature as a symbol of something else and looks past the natural world to a transcendent signifier. Advocates differ from other translators of nature in that they are motivated by a desire to empower the natural world through language in circumstances where they feel that wildlife or an ecological community is threatened by humanity. Whereas some writers working in the disciplines of science, religion, or literature are

concerned primarily with describing nature, the advocate seeks to promote the perceived interests of nature. These different rhetorical goals manifest themselves in two distinct acts of representation. In most instances of religious, literary, or scientific discourse, representation can be defined as an act of substitution, where a particular referent is symbolized by a dissimilar signifier. In this sense, the term is used to mean "The fact of expressing or denoting by means of a figure or symbol; symbolic action or exhibition" (*OED* 2498 2d). But in other contexts, representation is defined as a mediation of power. In this sense, representation denotes "The fact of standing for, or in place of, some other thing or person, *esp. with a right or authority to act on their account*" [emphasis added] (*OED* 2499 7a). It is this second form of representation, or, more properly, the *act* of representing that distinguishes the rhetoric of advocacy from other depictions of nature. The advocate does not merely use nature as a placeholder for some other concept, but acts as an intercessor on behalf of nature.

Representation of nature as it occurs in numerous literary conventions within almost every culture is not an act of advocacy, but of substitution. In most representations of nature, the animals, plants, or physical features of the natural world serve as figures of comparison within various forms of tropes. A lion, for instance, in Western literature is often a symbol of royalty or fierceness. The cat is merely what theorist I. A. Richards would call the "vehicle" for communicating the "tenor" or idea expressed within the

metaphor.¹⁴ The trope operates by finding resemblances between the symbol and the referent, and within the figure of speech, two dissimilar items are linked to each other through close association. The meaning of the symbol is largely emptied to make way for the concept or idea of the symbolized. The symbol (for example, a lion) then becomes a host to the referent (i.e. courage) and carries its meaning.

For instance, in the world of literature, nature occupies a central role in symbolizing basic human emotions, attributes, or concepts. In most cases, representations of nature constitute a sign system, where nature takes the place of a human sentiment or concept. The British Romantics, for example, were fond of writing nature poetry, but they primarily used nature as a means to represent some ideal which transcended the physical world. In their odes, plays, or prose the natural world was either a backdrop for the human drama or it might serve to illustrate some facet of the individual or social psyche. Writers like Wordsworth, Coleridge, and Keats valued nature as a medium for spiritual awakening, and their praise of mountains or meadowlarks is often inspired by the aesthetic or emotional responses that the natural element evokes.

Wordsworth's excursion to the peak of Mount Snowdon in the fourteenth book of *The Prelude* is a metaphorical journey through the mind. As the speaker makes his way up the slope, his experience suggests the stages one might expect to go through in seeking

¹⁴See I. A. Richards. *Philosophy of Rhetoric*. : . 1936.

higher awareness or spiritual revelation. The lower regions are enshrouded in mist and the hiker's progress is hampered by darkness and obstacles. Determined to gain some higher vantage point, the speaker pushes through the "dripping fog" and breaks through into a brilliant celestial moonlight. Here in the rarified atmosphere of the mountaintop, the speaker's efforts are rewarded, and he surveys the world below him "as far as the sight could reach":

When into air had partially dissolved
That Vision, given to Spirits of the night,
And three chance human Wanderers, in calm thought
Reflected, it appeared to me the type
Of a majestic Intellect, its acts
And its possessions, what it has and craves,
What in itself it is, and would become.
There I beheld the emblem of a Mind
That feeds upon infinity, that broods
Over the dark abyss, intent to hear
Its voices issuing forth to silent light
In one continuous stream. (63-74)

In this example, the mountain is "an emblem of a Mind" in which the foggy base represents a distracted and dulled intellect while the summit serves as a symbol of the perceptive and transcending imagination that facilitates human creative insight or spiritual enlightenment. For Wordsworth and the Romantics in general, nature was primarily a catalyst for self-introspection or metaphysical experience.

By contrast, in the rhetoric of advocacy nature is not a substitute for some other human construct, but an agent within the discursive relationship. While the advocate is the active speaker, he or she is "standing for, or in place of, [nature], . . . with a right or authority to act on [its] account" (OED 2499 7a). The purpose of nature advocacy is to protect the perceived interests of non-human nature and to win for nature a greater degree of moral consideration within the realm of human affairs. On a very basic level, the rhetoric of advocacy is motivated by a desire to prevent human activities from destroying the environment and to promote the physical well-being of all life. In situations where human conduct towards the environment is guided by language, the interests of non-linguistic nature are often lost amid competing human claims. The advocate acts the role of Wolf's Brother in the Oneida legend (see Chapter IV), interpreting the needs of other members of the living community and injecting those interests into the human political sphere. Thus, advocacy can be distinguished from other interpretations of nature in that

the discourse is motivated by the desire to transfer power to an otherwise powerless nature through the medium of language.

Those who speak for nature do so because they recognize the power of language to shape the physical world. As a general rule, all manipulation of our external environment that is not merely reflexive is set in motion by language. Describing, defining, categorizing, and interpreting the world through language are attempts to manipulate nature linguistically in order to gain some degree of control over it. In most instances, nature is transformed conceptually first, and then the physical work begins. Equations, charts, and writs of law dam the river before the first stone is laid in the stream; the wetlands are drained and planted in discourse before they are transformed physically into farmland; before radioactive waste can be buried in a salt mine beneath a mountain we employ language to predict the motion of the earth's crust and weigh our needs against those of unborn generations.

The nature advocates examined in this study comment in one way or another on the fact that the power to manipulate nature usually lies in the hands of those who define, describe, and name the landscape. The act of capturing and construing nature with words, agree most advocates, constitutes an exercise of force. Nowhere is this more evident than in America's environmental history. The various factions of settlers appreciated the appropriative power in language, and they went about applying their own idiosyncratic

appellations to the "New World" (Glouster, Baton Rouge, San Jose) to impress their identity upon the land and, more significantly, to secure their territory against the Indians and other immigrants (and their appellations).

In Daniel Shea's "'Our Professed Old Adversary': Thomas Morton and the Naming of New England," Shea describes how the contest between the Puritans and Morton was largely fought on linguistic grounds. Intent upon establishing their respective authorities, Shea asserts that Morton and the Puritans vied for the naming of (and thus the definition of) the New World. By describing the land in pastoral and native American terms, Morton tried to disrupt the nominations of the Separatists and transform the scriptural Promised Land into a more sensual pre-Christian paradise. Shea claims that Morton represented primarily a "literary threat" to the Puritans in that his loyalist/Renaissance vision of New England challenged the authority of the separatist/Reformation world view offered by the Puritans. Morton's text, *New English Canaan*, "translates" New England into a masque which, by its "lavishness" and as a royally sanctioned art form, "exclude[s] the Separatists, making them exiles in their own kingdom, and forbid[s] them entry to Canaan" (Shea 58). Morton's propensity for designating prominent geographic features with Indian or Arcadian names challenged the Puritans' hegemony and undermined their power to define the new continent as the site of a Christian theocracy. Consequently, the Separatist violently opposed Morton's language and world view, and, eventually, they

seized him and banished him from the country. Language, as Shea points out, facilitates one's power over the environment and serves to exclude competing claims.

Those who name a territory, an animal, or a phenomenon claim it as their own and, as property, the natural world is manipulated by the conquering namer. Today, zoning laws and ordinances are a good example of this. At the behest of various commercial interests, certain territories under the jurisdiction of towns or counties may be declared "industrial cites," "residential districts," or "business zones." Simply because of nomenclature, the fate of these "properties" is determined and a vision of their transformation is set in motion. Those areas which are named "industrial" will be transformed in keeping with that designation, while "wilderness areas" or "parks" are protected (ostensibly) by the sanctuary afforded by mere words.

To advocates, speaking for nature is a way to give the non-human world, in effect, the power of self-definition. For those who observe the phenomenon of the natural world, nature is always defining itself simply by being. In other words, the cycle of life, the balanced interaction of species, and the predictable behaviors of individual organisms exhibit aspects of continuity, purpose, and order that constitute identity. Relaying these impressions through discourse, the advocate attempts to approximate in words what nature exhibits in being. To Thoreau, the qualities of dignity and beauty possessed of living nature suggested that it was infused with "spirit," and to Muir, the harmony and

sublimity of the wilderness suggested that it was "sacred." For Leopold, the cyclical and never-ending exchange of energy in nature could best be described as a "round river." And to Carson, the intense bonds of dependence between all life and inanimate matter implied that nature expressed itself as a "web of life." These advocates employ a new vocabulary or nomenclature, *suggested by nature*, whose force is conservative rather than transformative. In other words, the propensity of nature to reproduce and perpetuate itself leads advocates to select metaphors which connote balance, temperance, and harmony. Sacred spaces, round rivers, and webs of life are all definitions which communicate a sense of wholeness, integrity, sustainability, and which, as a result, resist partition and destruction. The advocate offers nature's conservative "self-definition" as a remedy to violent metaphors such as "resource" or "wasteland" that encourage society to control, transform, or appropriate.

But the rhetoric of advocacy is not just a means of empowering nature by changing our vocabulary; advocates are intent on changing the way that discourse on nature is conducted altogether. For instance, in *Silent Spring*, Carson demonstrates that long-term environmental health requires that nature be made a contributing participant in human discourse. The development and implementation of environmental technology and science is relatively ineffectual, even dangerous, if it fails to consider nature's interests. To illustrate this point, Carson shows throughout her book that human interests are

inextricably intertwined with the interests of non-human nature: "Water, soil, and the earth's green mantle of plants make up the world that supports the animal life of the earth.

Although modern man seldom remembers the fact, he could not exist without the plants that harness the sun's energy and manufacture the basic foodstuffs he depends upon for life" (*Silent Spring* 63). Our physical connection to non-human nature should be reflected, suggests Carson, in the discourse we use to shape the world.

Carson and other advocates would admit that in order to survive we must manipulate the natural world. However, when we do alter nature, observes Carson, we "should do so thoughtfully, with full awareness that what we do may have consequences remote in time and place" (*Silent Spring* 64). At this point, Carson concerns herself with promoting a method of discourse that includes, as a regular component, a means for eliciting the voice of the "other." Because nature lacks human language, its interests must be inserted into discourse on those human affairs which impact it directly or indirectly. In speaking for nature, advocates protect the wilderness, and, simultaneously, they model the discursive behavior which they hope to establish within society. In essence, these writers offer advocacy as a method of discourse necessary for the long-term preservation of human and non-human life. In the case of the environment, the act of advocacy must be continuous, since it will always be necessary to articulate the interests of non-linguistic nature in the

human political sphere.¹⁵ Thus, to be effective, the project of advocacy must extend beyond a few scattered voices, requiring a fundamental restructuring of discourse in the political, economic, and social institutions that impact the environment.

The work of the advocates to win greater consideration for nature threatens the established ideology, and, as a result, advocacy has always sparked aggressive opposition. Especially in the twentieth century, when concerns about the environment have gained wide-spread public attention, representatives of industry and the government have worked diligently to challenge, discredit, and stifle environmental advocates. Many advocates point out that the environmental crises created by modern society are largely the result of a tendency of the dominant economic discourse to silence nature's voice. In *Silent Spring*, Carson illustrates that our successful efforts to suppress or exclude the interests of nature have resulted in the general deterioration of the biotic community that supports all life. One of the most persistent metaphors Carson uses in her book, the metaphor of war, describes the adversarial relationship that humanity maintains towards nature. Carson

¹⁵The ultimate goal of advocacy, in most cases, is to make itself superfluous or redundant. Advocates for ethnic minorities, for example, hope to win for their constituents the power of self-representation in a society of equals. At such a point, there would be no reason for advocacy for that group. But with nature, where animals, plants, and eco-systems will never speak directly for themselves, the role of the advocate must be a permanent fixture in human discourse. Advocacy addresses itself to the problem of inequality in general. As long as a disparity of power exists among members in a

describes mankind as engaged in a conscious "assault on the environment." Particularly guilty of this aggression are the industry scientists who, in total disregard of the interests of nature, create chemical pesticides or herbicides with the singular aim of eradicating entire species of "pests." "These sprays, dusts, and aerosols are now applied almost universally to farms, gardens, forests, and homes--nonselective chemicals that have the power to kill every insect, the 'good' and the 'bad,' to still the song of birds" (*Silent Spring* 7). The war metaphor serves to underscore the fact that Carson's role as advocate is necessitated by a fundamental disparity of power between oppressive humanity and persecuted nature in which nature lacks the necessary means--language--for representing itself.

Appropriately, within this battle metaphor humanity's dominance over non-human is described as a linguistic act, and "the power to kill" is equated with the power to suppress the voice of nature or "still the song of birds." Carson extends this connection between language and power within her battle metaphor, describing humanity's "conquest" of nature as an act of writing: "As man proceeds toward his announced goal of the conquest of nature, he has written a depressing record of destruction, directed not only against the earth he inhabits but against the life that shares it with him" (*Silent Spring* 85). The

community, say the nature representatives, advocacy must be a regular component of discourse.

success of humanity's war with nature is measured by nature's diminished voice. The title of Carson's book, *Silent Spring*, suggests that nature's silence is at once cause and consequence of its atrophy and its powerlessness. On one hand, the phrase suggests that nature's voice--the sign of its vitality--is silent as a result of destructive human manipulations of the environment. On the other hand, the title implies that the fact that nature is non-linguistic may be the cause of its demise, since it has no means of altering the discourse which dictates its fate. Either way, as the variety and vitality of non-human life is diminished, its "voice" grows fainter and fainter, compounding the problems arising from its inscrutability and obscurity. Consequently, it falls to the advocate to both interpret nature's interests and to invest those interests with the political force of language.

Carson offers her own language as the most expedient antidote to nature's deterioration. As the voice of spring song birds falters and society's ears are closed shut with indifference, Carson's voice becomes stronger and her rhetoric, in effect, serves as nature's plea for restraint. Although more inclined to write reserved, descriptive accounts of marine ecosystems, Carson met the aggressive physical assault on nature with a rhetorical counter-attack on both irresponsible producers and indifferent consumers. In the early 1960s when industrialism was proceeding with little concern for the environment, inciting fear seems to have been one of the only ways to shock the

American public out of its lethargy. Jimmie Killingsworth and Jacqueline Palmer, authors of *Ecospeak*, note that Carson relied heavily on alarmist rhetoric, constructing an "apocalyptic narrative" intent on exposing the "dark side of technological progress" (65). "Can anyone believe it is possible," asks Carson, "to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not be called 'insecticides,' but 'biocides'" (*Silent Spring* 7-8). Killingsworth and Palmer point out that Carson's hyperbolic tone was shaped within the context of an ecological crisis, and, under the circumstances, was particularly effective at swaying the balance of power in nature's favor: "For an author who believes in the need for immediate action, present action that is required to forestall a human disaster in the future, this rhetorical tactic has great power" (67).¹⁶ *Silent Spring* raised a furor among the general public, prompting President Kennedy to appoint a commission to study the problems associated with chemical pollution and inspiring the Congress to consider a number of bills in the 1960s and 70s aimed at protecting human health and the environment.

¹⁶The authors note that hyperbole as a rhetorical strategy also has some drawbacks: "The appeal to emotion in the rhetoric of public debate is always risky. A writer who seeks one response may elicit a contrary one. Fear can cause readers to open their eyes wide or shut them tightly" (*Ecospeak* 71). However, in the context of the existing rhetorical setting, where the public was uninformed and, thus, indifferent regarding the implications of chemical pollutants, Carson's pathos proved to be an effective strategy for initiating social change.

The attempts of concerned citizens like Carson to empower nature through language have inspired a concerted effort among developers and corporations to check the role of advocacy in the public forum. Despite the success of advocates like Carson to raise public awareness concerning pollution, industrial capitalism has been able to resist demands for environmental reform by, among other things, denying advocates a role in shaping public policy. The voice of the advocates and, hence, the interests of nature are marginalized in a political process that disproportionately favors resource industries and economic expansion over environmentalists and sustainability. In many instances, the American legal system, with its emphasis of protecting "private property," contains provisions for silencing advocates' opposition to environmental exploitation. Many resource industries have made use of strategic lawsuits against public participation (commonly known as SLAPPs) to silence under-financed, grass roots protests. For instance, in 1984, when confronted with public protests concerning its plans to construct a sprawling resort in the alpine town of Squaw Valley, Perini Land Development Company sued one vocal resident for \$75 million, falsely accusing him of trying to invalidate a prior land-use agreement (Manes 203-4). Because of the expenses involved in defending against such SLAPPs, this tactic has proven successful in curtailing public participation, even when most suits are ultimately dismissed.

Much of the environmental legislation that has been written since Carson's day bears the impress of corporate interests and adheres closely to the utilitarian perspective. For instance, the regulatory approach of the United States regarding air and water pollution is based upon a system of "pollution permits." Under this plan, the government allows utility companies, heavy industries, and waste incinerators to buy their way out of compliance. Rather than reduce the toxicity of their effluent, companies purchase a permit or "a property right to emit a maximum quantity of pollutants" (Siebert 116). Legislative reform, if it comes at all, is very slow in coming--120 years and counting in the case of the American mining industry. Bound only by the antiquated General Mining Law of 1872, hardrock miners continue to enjoy access to more than 400 million acres of public lands, and the government deeds over the title to the mineral rights for an absurd \$5.00 an acre (Hamilton 50). Even today, environmental legislation produced by the 104th Congress was written, word for word in some instances, by industry representatives.¹⁷ Environmental "reforms" are often a corporate-sanctioned alternative

¹⁷The Congress has consistently passed legislation that allows corporations to avoid environmental legislation when it interfered with profits. The North American Free Trade Agreement, which Clinton and Gore endorsed, is designed to facilitate international commerce by eliminating a variety of tariffs, duties, and other restrictions that deter U.S. companies from investing in Mexico, while simultaneously dismantling environmental, health, and labor regulations. Maquiladora industries have created atrocious conditions for the Mexican workers in the name of profit. Toxic industrial wastes and raw sewage are dumped into canals and streams causing increased rates of

to real change that offers appeasement and incremental adjustments in place of real environmental progress. Any changes that do come about as the result of demands by environmental groups are, in a sense, tactical retreats by big business, intended to prevent environmental advocacy from becoming an established and permanent component of economic decision-making.

In the face of concerted efforts on the part of political and commercial interests to marginalize and suppress the interests of nature, the rhetoric of advocacy expanded in the latter-twentieth century to include more subversive tactics. Up against an increasingly intransigent coalition of federal authorities and developers, Edward Abbey's advocacy takes on an edge of urgency in his later works. In the novel *The Monkey Wrench Gang* (1975), advocacy incorporates activism, and Abbey describes the antics of a group of environmentalists who thwart the efforts of developers in an escalating series of subversive acts. In the novel, four friends living in the desert Southwest look on with

hepatitis, gastro-intestinal illnesses, infant mortality, and certain forms of cancer. In the border town of Matamores alone, discharges of toxic fumes have forced major evacuations seven times since 1986. Similarly, rules set forth in the final draft of the GATT agreement require the United States to "harmonize" its regulations with less stringent international codes. Under GATT and NAFTA, any health or environmental standard deemed to pose an "unnecessary" trade barrier will be condemned as illegal. In 1988, Canada used the Free Trade Agreement to challenge the U.S. ban on asbestos, winning an appeal in American courts to import the carcinogen into the country. In hearings on these polluter bills, the environmentalist community was consistently under-represented and their concerns marginalized.

anger and frustration as the Bureau of Land Management, mining companies, the nuclear industry, utilities, and ranchers carve up the Utah and Arizona desert for development. Bonnie, a member of this "monkey wrench gang," expresses the group's feelings of helplessness in the face of a political process geared to protect the interests of industrial capitalism:

But they have everything. They have the organization and the control and the communications and the army and the police and the secret police. They have the big machines. They have the law and drugs and jails and courts and judges and prisons.

They are so huge. We are so small. (*Monkey Wrench Gang* 169)

Excluded from the sanctioned discourse (and believing it to be a futile route anyway), these fictional characters resort to physical acts of protest, pulling up surveying stakes, sabotaging construction equipment, and generally blocking industrial expansion into the wilderness at every turn: "One way or another, they were going to slow if not halt the advance of Technology, the growth of Growth, the spread of the ideology of the cancer cell" (*Monkey Wrench Gang* 207).

The story culminates with an extended chase, where developers and federal agents attempt to put an end to the advocates' protests--and thus effectively silence nature's voice--by arresting them. After a campaign of "sophisticated harassment techniques" that included cutting down billboards, derailing a coal train, and destroying earth moving

equipment, three of the four members of the gang are finally apprehended. However, the most committed member, George Heyduke, refuses to surrender and a posse of law enforcement officers and hired guns for local industries track the activist down and attempt to kill him. After pursuing their quarry to the edge of a cliff, the posse fires a barrage of bullet at the rebel, hurling his body into the river below.¹⁸ Symbolically, the climax plays out the power struggle between the language of the advocate and the language of the dominant culture which, when confronted with a challenge to its hegemony, moves to suppress the other discourse. The man responsible for orchestrating the capture of the Monkey Wrench Gang, a gubernatorial candidate, reminds the group of its ideological defeat after the melee: "Industry," gloats the politician to the subdued advocates, "that's our state motto, 'industry.' . . . We're gonna transfer this whole goddamned so-called national park to state ownership soon as I'm in, mark my words" (*Monkey Wrench Gang* 350). The violent opposition Abbey's characters face reflects the growing animosity advocates experience in the latter twentieth century as their pleas for greater consideration of nature in human affairs threaten the profit margins of resource industries.

¹⁸Later it is revealed that the posse had shot at a dummy--Heyduke's clothes stuffed and propped obscurely at the cliff's edge. Heyduke returns in a subsequent novel to fight again.

The resistance of industry and government to popular demands for environmental reform led to the inception of a variety of real advocacy groups like EarthFirst! that have dedicated themselves to environmental activism. Since the 1960s, new ranks of advocates have expanded the repertoire of environmental rhetoric to include a more militant approach. In addition to protests, speeches and letter-writing campaigns, symbolic acts have become a regular component of advocacy. In 1981, a group of radical environmentalists, inspired by Abbey, protested the existence of the Glen Canyon Dam in Arizona and the policies which led to the construction of that and many other dams. To express their contention that the dam be removed, a small band of demonstrators unfurled a huge banner representing a gaping crack down the front of the edifice. The move brought national attention to the plight of riparian habitats and contributed to discussion on regulating dam construction.

Dave Foreman, who participated in the Glen Canyon demonstration, is an advocate who has promoted the symbolic act as an effective rhetorical strategy. In *Confessions of an Eco-Warrior*, Foreman argues that the time for polite negotiations is over.¹⁹ The

¹⁹Since writing *Confessions*, Foreman has altered his approach to advocacy somewhat. Rather than working for nature's defense through personal acts of eco-tage, Foreman now feels that the best results may be obtained by collective political action. He is now a member of Sierra Club and regularly contributes to their magazine. Nevertheless, the philosophies he outlines in *Confessions* reflect the beliefs of many environmentalists, and nature advocates continue to incorporate rhetorical acts into their repertoire.

traditional methods of state-sanctioned argumentation and compromise have always favored the powerful interests of private and public developers. Furthermore, says Foreman, those environmental advocates who promote nature's interests through approved forums of debate are often misled into representing human interests exclusively. "Radicals are effectively dealt with," observes Foreman, "by giving them a place in the structure, where they are co-opted" (Foreman 215):

Efforts by conservationists to preserve viable old-growth ecosystems by working within the system are failing. . . . Therefore, responsible tree spiking (done as a last resort after legal means, civil disobedience, and lesser forms of monkeywrenching have failed; and only with full warning to the land-managing agency and timber harvesters) is justified and ethical. (Foreman 156)

Foreman frequently compares environmental activism to methods of "civil disobedience" adopted by the likes of Ghandi and King. Like the political protests that seek social justice, Foreman contends that the subversive demonstrations and symbolic actions of radical environmentalists are acts of advocacy intended to empower the disenfranchised.

In a study on confrontational rhetoric, Robert Cathcart analyzed the practices of radical groups like EarthFirst! in order to assess the impact such organizations have on public discourse. To Cathcart, the "ritual conflict" employed by activists provides the disenfranchised access to the public debate while resisting the dominant cultures's efforts

of appropriation. Confrontation, says Cathcart, "is not anti-communication but rather is an extension of communication in situations where confronters have exhausted the normal (i.e. accepted) means of communication with those in power" (236). In these contexts, confrontation is yet another form of advocacy which seeks to broker power to nature, but in a way which goes outside the confines of sanctioned discourse. The rhetorical acts of groups like EarthFirst! have the added benefit of exposing and debilitating the oppressive force exercised by established institutions:

It is the act of confrontation that causes the establishment to reveal itself for what it is. The establishment, when confronted, must respond not to the particular enactment but to the challenge to its legitimacy. If it responds with full fury and might to crush the confronters, it violates the mystery and reveals the secret that it maintains power, not through moral righteousness but through its power to kill, actually or symbolically, those who challenge it. (Cathcart 246)

In the act of confrontation, radical advocates offer themselves as martyrs for non-human nature, taking the wrath of an unjust oppressor for the sake of galvanizing resistance to that force.

This more radical strain of advocacy goes beyond a simple expression of nature's interests. Advocacy that involves confrontation can also be seen as a ritualized expression of nature's tendency to act in self-defense. The radical advocate interprets the

degradation of nature and the resulting ill-effects on human health as if the environment were reacting to human threats with aggression (the fight component of the "flight or fight" response of a cornered animal). Declining soil fertility, polluted air, toxic water, and increased UV radiation represent instances where the environment has seemed to turn on humanity. The physical "defense" nature exhibits in response to human exploitation is expressed rhetorically by radical advocates in the form of acts of sabotage, intervention, and protest.

Treating the Earth as an organism, some describe environmental degradation metaphorically as nature's way of trying to purge itself of the human "virus" that infects it. Extending the metaphor, Foreman likens the advocates to antibodies, and suggests that they, as the wilderness's "warrior society," are a natural component of nature's self-defense:

In our decimation of biological diversity, in our production of toxins, in our attack on the basic life-support system of Earth, in our explosive population growth, we humans have become a disease--the Humanpox. . . . Antibodies need no justification.

Their job is merely to fight and destroy that which would destroy the greater body of which they are a part, for which they form the warrior society. (Foreman 57-58).

From this perspective, the symbolic act is nature's own gesture; the advocate is, in effect, nature's language. By acting passionately, impulsively, swiftly--much in the way that

nature would, Foreman suggests that the advocate "speaks" in nature's non-linguistic language, not as mediator or intercessor, but as an extension of nature. "Our most fundamental duty is that of self-defense," says Foreman in *Confessions*. "We are the wilderness defending itself" (50).

6.2 Nature Speaks: Re-Aligning Rhetorical Power

While these acts of advocacy change the balance of physical power, speaking for nature also effects a conceptual realignment of power. The advocate mounts a rhetorical challenge to human dominance by reconstituting nature as a political entity. By speaking for nature, the advocate alters the lines of power between the rhetorical components of speaker, message, and audience. No longer the subject of discourse, nature becomes an agent of discourse, possessing the same rhetorical stature as its audience. At the same time, the human participants--advocate and audience--relinquish some of the power they would normally exercise when nature is in the conventional position of subject.

Ultimately, giving voice to nature modifies the structure of our discourse, initiating the rhetorical conditions necessary for a fundamental revision of our relationship to nature.

First of all, speaking for nature changes the role of the advocate relative to the other rhetorical components. Acting as a mouthpiece for the "other," the advocate is not so much a speaker as a medium for the speaker. Interpreting and translating the language of nature, the advocates are facilitators who convey intentions and designs not (entirely) their own. For instance, Wolf's Brother relates the needs of Wolf, Cole conveys the dismay of the forest, and Le Guin represents the sentiments of a whole community of animals. In cases of both direct and indirect representation, nature's interests provide the motivating force for the discourse. In relation to the audience, the advocate seeks to deflect attention away from herself and onto nature, facilitating the relationship between audience and nature in much the same way that a translator fosters the relationship between speaker and audience.

By adopting the role of intercessor or medium, the advocate is transformed rhetorically from speaker into a component of the message. In this sense, the advocate serves as the text or voice necessary to give conceptual form to nature's needs or desires. Much in the way that language makes meaning of experience, the speaking advocate gives shape and meaning to the non-linguistic phenomenon of nature. And, like language, the advocate operates essentially by metaphor. Emptying themselves (as much as possible) of their own interests and desires, the nature representatives make way for the meaning of nature. Like a metaphor, the advocate is not the thing he or she represents (a

forest, whales, the Earth), but--to borrow the terminology of linguistics--a signifier of the absent signified. In this way, the representative who purports to give voice to nature acts out a part in the play of substitution that is at the heart of all language. The human speaker, who is defined as a language-using being, becomes, appropriately, the Word, standing in place of the mute object. This practice of acting as placeholder mimics the associative property of language which gives metaphor its power to make new meanings. In other words, the success of advocacy derives from the fact that it is essentially a metaphorical process, and, hence, the audience can take the voice of the advocate to *mean* the interests of nature.

Combined, the voice of the advocate and silent meaning of nature form an entirely new trope--speaking nature. The image of nature speaking becomes the master trope of advocacy in which two seemingly incompatible attributes, voice and silence, are linked together for the purpose of communicating a radically new idea: the notion that "voiceless" nature is indeed a rhetorical being. The metaphor helps to codify experience, suggesting an analogy between nature's expression and language. But the trope is more than a form of analogy, displacement, or substitution. Once established, the image of speaking nature informs the meaning of all subsequent experiences. In the case of advocacy, the original signified (nature) becomes infused with the concept created by the metaphor (nature as a speaking entity). In this circular pattern of experience and

description, the metaphors created in advocacy reinforce an experience of nature as expressive, which in turn informs subsequent experiences and descriptions.

In adopting the subordinate role of vehicle or medium in this subversive metaphor, the advocates seem to implement within rhetoric the very transference of power they seek to promote within the physical world. The trope of speaking nature serves to initiate, in a subtle yet persistent way, the power transfer that is the ultimate aim of advocacy. Over the course of several decades, the metaphor has become established, and there is evidence that nature is increasingly accepted as exhibiting aspects of sentience and "interests" that afford it certain "rights." For example, after many years of struggle, the issue of humanity's obligation to the environment, though marginalized, has become a recurrent theme in the fabric of political discourse. Such gaps and disruptions in the dominant discourse suggest that the advocates, and nature, have been heard.

Second, the rhetoric of advocacy also transforms nature's role relative to the rhetorical components of audience and message. One of the benefits of speaking *for* nature is that it gives us a way of thinking which breaks out of the tendency to perceive the natural world as an inanimate thing. Rhetoric in which nature is the passive, manipulated subject of discourse reflects and reproduces the dominant discourse of commodification and utilization. When nature serves as a vehicle for communication, it is reduced--to use an economic metaphor--to a sort of conceptual resource or raw material. Returning to the

Prelude, Wordsworth's Mount Snowdon is "an emblem of the mind," and nature is essentially appropriated to represent abstract themes concerning the human imagination. As a symbol of a human faculty, nature is emptied of its meaning and transformed into a conceptual product that serves the speaker. Mirroring exploitative behavior in the physical world, the human speaker manipulates nature as a conceptual commodity within a rhetorical exchange between himself and the audience. For instance, in using Mt. Snowdon as a symbol of the mind, Wordsworth divests Snowdon of its "mountainness" and invests it with the new value or tenor--"mind." Transformed and objectified, this new image of nature is presented to the audience to be analyzed, categorized, and intellectually "consumed" as a thing rather than a being. Employed with the sole objective of serving human interests, representations of nature may prove expedient or useful to humanity, but extremely detrimental to the well-being of nature. (Consider, for example, the fear and hatred incited towards snakes by using the serpent as a metaphor for Satan. Similarly, as eco-feminist have noted, the practice of depicting nature as mistress, virgin, and mother in a patriarchal society has caused many to direct their frustration and anger at nature.) The power of nature is severely diminished in the position of subject, and, to the advocates, the rhetorical commerce in nature-as-symbol constitutes a form of coercive force.

By contrast, in the rhetoric of advocacy, nature is presented as a self-motivated agent in the dialogue rather than the subject of discourse. By representing nature's "language," either directly or indirectly, the nature writer attributes expressive powers to the natural world, placing it in a position to actively address an audience. For instance, in *A Sand County Almanac*, the sufferings of a wounded wolf are translated into an indirect injunction from nature against indiscriminate slaughter: "I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view" (Leopold 138-9). Here, speaking nature becomes a participant in shaping the relationship between humanity and the natural world and not the passive subject of discussion. In Leopold's account of the killing of a wolf, the human, utilitarian perspective is countered by the perspective of the mountain and the wolf--a view that provides a disruptive moral subtext to the dominant discourse.

In the position of speaker, nature's power is greatly enhanced within the discursive relationship, in large part because it allows for a more powerful use of pathetic appeals. In Le Guin's "Buffalo Gals," Grandmother Spider asks the young girl not to indiscriminately kill her kind, claiming for herself, as a speaking entity, the same moral consideration due to any sentient being. As speaker, nature assumes the stature of rhetorical equal to the audience. Conceptually, the effect of this move is that non-human nature, generally

perceived as alien and mysterious, evokes a greater degree of identification from the audience, and, hence, commands more sympathy. Because the advocate is in the role of mediator, the audience transfers its emotional sympathies directly to speaking nature.

Finally, on a related note, advocacy changes the role of the audience relative to the speaker and the advocate. While installing nature in the role of speaker, the trope of speaking nature simultaneously displaces the human agent from that position, effectively revising the dominant anthropocentric model of language. Symbolically, linguistic ability is redistributed evenly as a universal rather than a human attribute. Confronted with a nature that expresses will, sentience, and language, the audience is obligated, rhetorically, to interact with nature as a moral being. The speaking trees of Cole's poem evoke concern for the disappearing forests in part because we as humans can sympathize with nature's drive for self-preservation. But language provides an even stronger force in uniting speaker and audience, and our sympathies for the forest are dramatically heightened because it is a *speaking* entity. An audience that perceives nature as sentient, conscious, and willful is more likely to extend non-human life greater moral consideration.

The subject demands extensive discussion, and in Chapter Six, I examine the philosophical implications of giving language to nature, focusing explicitly on how the perception of nature as speaker transforms the dynamic of power between humanity and

nature. In the discussion that follows, I attempt to demonstrate that the idea of nature as possessing language represents a significant challenge to human claims of superiority, and, as a result, threatens to revise our notions of ourselves relative to nature.

PART THREE

THE IMPLICATIONS OF ADVOCACY

CHAPTER VII

ADVOCACY'S CHALLENGE TO HUMANISM

The efforts of advocates to present nature as a speaking entity challenge strongly held assumptions about human superiority. One of the ways we have justified our domination of nature is that we possess distinctive attributes which entitle us to order the world to our liking. Some have suggested that the distinction is biological, that humans alone have an erect posture. Others say it is behavioral, that we cook our food, we use or create tools, or that we own property. But the difference between humanity and animals is most frequently attributed to the fact that we alone are a language-using animal. For a variety of reasons, thinkers from successive generations have asserted that the capacity for speech makes humanity superior to all other life forms.

Within nearly all expressions of humanism, from antiquity to the Renaissance to present, language and its related faculties of reason and imagination are cited as justification for exalting human nature. One of the fundamental tenets of humanism is that personhood and all the privileges accorded to moral beings derive from the assumption that we are of an entirely different order than animals, lodged somewhere

between the animal and the divine. For humanists, the capacity of speech, with its conceptual and creative force, suggests that the greatest secrets of the universe, the most improbable feats of engineering, and the most sublime expressions of art are attainable for humanity. Animals, on the other hand, are described as an imperfect or primitive expression of life, incapable of thought, intention, or even consciousness.

By attributing language to nature, the advocate undermines the validity of humanity's claims to superiority by establishing nature as a self-motivated, moral entity. If, as the advocate contends, nature possesses its own "language," then proponents of humanism lose their strongest case for asserting a strict qualitative difference between nature and humanity. When seen as an expression which pervades all of nature, language becomes a relatively insignificant category for comparison, and humanity can claim superiority only as a matter of degree within a narrowly defined set of linguistic parameters. Thus, giving voice to nature is a subversive act that initiates a fundamental re-ordering of human moral philosophies along biocentric lines.

7.1 The Exclusive Prerogatives of Humanity

In his philosophical survey of the views on animal awareness, *The Difference of Man and the Difference it Makes*, Mortimer Adler delineates how one's views regarding the qualitative difference between human and animal communication influences the confidence with which one asserts human moral superiority. According to Adler, we can

divide commentators on this topic into two major categories: those who suggest that humanity differs radically in kind from animals, and those that claim humanity differs superficially in kind or merely in degree from other animals (Chapter 2). The position we take as individuals or as a society on this matter determines, to a large degree, the moral consequences we ascribe to our interactions with nature.

Through much of the history of Western civilization, language has been described as the exclusive prerogative of humanity. Aristotle, Descartes, many Christian theologians, Chomsky and others have defined humanity as essentially discontinuous with non-human nature. Such arguments that propose a radical difference in kind are based on the assumption that there exists "a factor in the constitution of man that is totally absent from the things with which he is being compared" (Adler 27). Under the influence of these humanistic²⁰ views, contemporary ethics posit an unbridgeable distance between humans and animals, where all moral value resides with us and none can be ascribed to animals. An overview of some of the most influential philosophical, theological, and scientific

²⁰Throughout this chapter I will use the term humanism to designate a general view of humanity expressed in cultures from classical Greece to contemporary society in which humans are thought to be elevated and distinct from the lower creatures. Broadly defined, humanism tends to exalt the human species, extolling the virtues of all those qualities which seem unique to humanity such as language and all the cultural apparatus that come with it. Classical, Renaissance, and modern humanists all share the common belief that people possess a special dignity, be it spiritual or psychological, absent in all other life forms.

theories on language reveals apologists for human superiority often identify language as a symptom of or evidence for some elusive human quality like spirit or reason. This Human Element, then, is seen as proof of a radical difference and becomes the justification for humanity's dominance of nature

To Hellenic philosophers, speech was significant not only because it constituted verbal communication, but because it involved persuasion. Humankind was distinct from the rest of the animals because we were able to communicate intentions and values in a way that constructs political culture. On the topic of human superiority, Isocrates was careful to admit that in many respects we are inferior to animals. Many creatures are swifter, some excel in sense of smell or hearing, and many animals are stronger and larger. However, in our persuasive powers, he observes, we are unique. Humanity has overcome these deficiencies and mastered the environment, argued Isocrates, because rhetorical arts have made cooperation and communication possible:

[B]ecause there has been implanted in us the power to persuade each other, . . . not only have we escaped the life of wild beasts, but we have come together and founded cities and made laws and invented arts; and, generally speaking, there is no institution devised by [humans] which the power of speech has not helped us to establish. (qtd. in Corbin 289)

Like Isocrates, Aristotle believed that language set humans apart from animals in that it allowed us to be political beings. But in addition to giving human existence political dimensions, language, says Aristotle, gives humanity its distinctive moral quality. In *Politics*, Aristotle contends that the crowning achievement of Greek society, the polis, is made possible by the fact that language facilitates moral consensus--the foundation of any political unit:

The reason why man is a being meant for political association, in a higher degree than bees or other gregarious animals can ever associate, is evident. Nature, according to our theory, makes nothing in vain; and man alone of the animals is furnished with the faculty of language. 11. The mere making of sounds serves to indicate pleasure and pain, and is thus a faculty that belongs to animals in general: their nature enables them to attain the point at which they have perceptions of pleasure and pain, and can signify those perceptions to one another. But language serves to declare what is advantageous and what is reverse, and it therefore serves to declare what is just and what is unjust. 12. It is the peculiarity of man, in comparison with the rest of the animal world, that he alone possesses a perception of good and evil, of the just and unjust, and of other similar qualities; and it is association in [a common perception of] these things which makes a family and a polis. (Aristotle 5-6)

From this perspective, the "perception of good and evil" would not be possible without language. Humanity sets itself apart from the rest of nature not because we use sound symbols to convey immediate passions or sensations, but because we assign *values* to human actions and to the universe through language. Because the faculty of speech allows for a level of abstraction, and hence evaluation, it enables humanity to construct a system of morals.

This connection between morality and language has had far-reaching implications in Western culture. Ancient Greeks and Christian theologians alike have asserted that language was evidence of the existence of a human soul. Many medieval theologians tried to explain humanity's capacity for language by referring to scripture. According to the Bible, man was made "in God's image." Augustine, among others, argued that it was the human mind, and not the physical body, that most reflected the image of the Creator. The capacity for speech was one characteristic that humanity seemed to share with God. Just as God had spoken the world into being, man, too, orders his world by speech. In Genesis, language gives Adam power over the rest of creation in that he establishes the identity of the other creatures through the act of naming:

So out of the ground the LORD God formed every beast of the field and every bird of the air, and brought them to the man to see what he would call them; and whatever the man called every living creature, that was its name. (Genesis 2:18)

Since no other animals in God's creation could speak, language placed humanity between the angelic and the bestial. Thus, speech was not merely an intellectual feat, it moved humanity closer to the divine. Conversely, linguistic "confusion" was seen as a sign of spiritual deficiency. Augustine argued that physical attributes were evidence of one's spiritual condition. "As the tongue is the instrument of domination," observed Augustine, "in it pride was punished" (qtd. in White 16). Consequently, those who were deemed inarticulate or dumb had, according to Augustine, acquired these deficiencies through some moral fault of their own.

Like Augustine, Saint Thomas Aquinas asserted that the human mind "reflects the likeness of God in a higher way than creatures of lower degree" (Aquinas 83). One of the characteristics possessed of both God and humanity, says the theologian, is the faculty of reason. This becomes significant for Aquinas when considering the question of free will and intentionality. In *Summa Contra Gentiles*, Aquinas argues that "the very condition of the rational creature" is that it has "dominion over its actions" (220). For Aquinas, reason was a necessary condition for free will. Without it, all acts are but responses to external forces, and thus irrational creatures could not be said to express intent through their actions. Instead, their behavior is guided by unconscious passion, and "every other kind of creature [except man] is naturally under slavery" (Aquinas 112). Free will, argues Aquinas, is the prerogative of rational humans who execute intentional acts, and that

intentionality exists only in as much as one can deliberate the relative virtues of one's choice. "The fact that man is master of his actions," concludes the theologian, "is due to his being able to deliberate about them; for since deliberating reason is indifferently disposed to opposites, the will can proceed to either" (Aquinas 229). Thus, discerning values and moral decisions requires argumentation, a process that inarticulate beasts cannot perform. Without the capacity to discriminate between various actions, animals are like "instruments" that serve some purpose other than their own existence. The attribute of speech and, more specifically, reason not only distinguished humanity from animals, but suggested to Aquinas that God loved humanity more than the rest of creation. "[I]ntellectual creatures are ruled by God as though He cared for them for their own sake," boasts Aquinas, "while other creatures are ruled as being directed to rational creatures" (Aquinas 220).

By the Renaissance, an infusion of humanist thinking had redirected public attention on the political and social implications of the power of speech. Like Isocrates and Aristotle, Hobbes was convinced that language gave rise to civilization and elevated humanity above brute creation:

But the most noble and profitable invention of all other, was that of SPEECH, consisting of *names* or *appellations*, and their connexion; whereby men register their thoughts. . . without which, there had been amongst men, neither commonwealth, nor

society, nor contract, nor peace, no more than amongst lions, bears, and wolves. The first author of *speech* was God himself, that instructed Adam how to name such creatures as he presented to his sight. (Hobbes 18).

In a variation on Hellenic and Christian tradition, Hobbes and other Renaissance thinkers (and, later, the empiricists of the Enlightenment) gradually shifted their efforts from describing the social implications of language to investigating how language functioned as a faculty of mind. From the Renaissance forward, human linguistic superiority is increasingly attributed to psychological attributes like reason, memory, or association. In the first part of *The Leviathan*, Hobbes explains his theory that language joins concepts to sounds or symbols:

The general use of speech, is to transfer our mental discourse, into verbal; or the train of our thoughts, into a train of words; and that for two commodities, whereof one is the register of the consequences of our thoughts; which being apt to slip out of our memory, and put us to a new labour, may again be recalled, by such words as they were marked by. So that the first use of names is to serve for *marks*, or *notes* of remembrance. Another is, when many use the same words, to signify, by their connexion and order, one to another, what they conceive, or think of each matter; and also what they desire, fear, or have any other passion for. And for this use they are called *signs*. (19-20)

For Hobbes, words are signs of cognitive processes already at work, "mental discourses" that lack only a system of signs in order to become transferable. In this way, speech is an indicator of conceptual thought or intellect, and is an outward proof of the existence of an otherwise inscrutable mind.

Furthermore, because words can register our thoughts, and to some extent solidify fleeting and fragmentary concepts, they facilitate much more complex and challenging mental processes such as the exercise of logic or of moral judgement. "So that without words," argues Hobbes, "there is no possibility of reckoning of numbers; much less of magnitudes, of swiftness, of force, and other things, the reckonings whereof are necessary to the being, or well-being of mankind" (23). From Hobbes's perspective, language is a necessary condition of the most sophisticated and uniquely human mental attributes. Whereas Hellenic philosophers and Christian theologians speculated that speech was a product of thought, Hobbes's argument implies the reverse, that thought is in part a product of language.

Rene Descartes, a contemporary of Hobbes, was perhaps the most influential of rationalist thinkers to write on the uniqueness of human language. Descartes asserted that animals were essentially biological clockwork, while people possess spirit and mind, as evidenced by language. If beasts had any faculty of reason at all, he argues, they would strive to make themselves understood. Since they are unintelligible, they prove

themselves to be merely animated matter, living machinery without mind or conscious intentions. In *Discourse and Essays*, Descartes asserts that the lack of speech among animals is testimony to their patent inferiority:

For it is quite remarkable that there are no men so dull-witted or stupid--and this includes even madmen--that they are incapable of arranging various words together and forming an utterance from them in order to make their thoughts understood; whereas there is no other animal, however perfect and well-endowed it may be, that can do the like. This does not happen because they lack the necessary organs, for we see that magpies and parrots can utter words as we do, and yet they cannot speak as we do; that is, they cannot show that they are thinking what they are saying. On the other hand, men born deaf and dumb . . . invent their own signs to make themselves understood This shows not merely that the beasts have less reason than men, but that they have no reason at all And we must not confuse speech with the natural movements which express passions and which can be imitated by machines as well as by animals. (Descartes 140)

To Descartes, it seemed that animals should require "very little reason to be able to speak." The fact that even the most "superior" of animals could not approximate human language suggested to him that they must have souls that were "completely different in nature from ours" (Descartes 140). Other skills--physical strength, a sophisticated sense

of smell, heightened sense of hearing, etc.--were no indication of intelligence, but just the opposite. If these skills were truly born of intelligence, says Descartes, they would "excel us in everything" since humanity is often outmatched by animals in many categories of physical prowess. The fact that these skills do not spring from intelligence proves, says Descartes, that animals possess "no intelligence at all," and that their actions are instead the result of the "disposition of their organs" (Descartes 141). Animal vocalizations were deemed unconscious spasms of the biological machinery, while human speech was evidence of intention, intelligence, free will, and spirit.

Descartes's views on human language were profoundly influential, and a host of philosophers, anthropologists and linguists elaborated on his assertion that speech sets humankind apart from all other species. As science became more and more secularized, modern theorists continued to see speech as the exclusive prerogative of humanity, but based their claims increasingly in biology. The legacy of Descartes was that scientific rationalism replaced theology as an explanatory method, and his search for the source of human linguistic superiority has now shifted to the realm of physiology.

Like Descartes, the renowned linguist Noam Chomsky contends that humanity has a species-specific capacity for language. In *Cartesian Linguistics* he reiterates Descartes's sentiments that speech represents the unique ability to express intentions. In this study on the influence of Cartesian linguistics, Chomsky summarizes Descartes's mechanistic view

of language: "The essential difference between man and animal is exhibited most clearly by human language, in particular, by man's ability to form new statements which express new thoughts and which are appropriate to new situations" (*Cartesian Linguistics* 3). Similarly, Chomsky argues that the acquisition of language is facilitated by "cognitive structures" which are innate in humans. Language, according to this view, is our biological birthright. In *Rules and Representations*, Chomsky devotes an entire chapter to justifying the "Biological Basis of Language Capacities." Here he argues that "we may suppose that there is a fixed, genetically determined initial state of the mind, common to the species with at most minor variation apart from pathology. The mind passes through a sequence of states under the boundary conditions set by experience, achieving finally a 'steady state' at a relatively fixed age" (*Rules and Representations* 187). In other words, Chomsky agrees with Descartes that humans are unique in their possession of language, but disagrees about the source of those linguistic skills. Whereas Descartes ascribes linguistic superiority to the existence of a soul, Chomsky asserts that our unique facility with language is biologically based.

Rectifying current methodologies which, in his opinion, have overlooked Cartesian linguistics, Chomsky asserts that human language is based on an entirely different principle than animal communication, possessing its own "rules of concept formation" and grammar that seem to be universal to human beings. However, within these genetic

parameters, language serves as a system for expressing free thought in a limitless variety of ways. One of the characteristics of human speech is that it "can serve for all contingencies," and thus is "free from the control of independently identifiable external stimuli or internal states." This stands in stark contrasts, argue Cartesians, to animals language which is restricted to practical communicative functions (*Cartesian Linguistics* 29). Our modes of cognition, argues Chomsky, predispose humans to be language-using animals, and much of the principles that guide our formation of grammars are embedded in our neuro-physiological inheritance. This is not, in itself, enough to give us language, but the "initial state of the [human] mind" greatly facilitates our linguistic organization and manipulation of the world.

Animals, on the other hand, have a much more rigid set of instincts that dictate their communicative capabilities. The "pseudo language of animals," as Chomsky calls it, is largely instinctual, repetitive, autonomous, or mimetic. Habit and instinct determine their behavior, limiting the degree to which free expression and creative thought can be achieved or articulated. For Cartesian linguists, "the perfection of instinct varies inversely with intellectual ability;" thus, the more an animal's communicative behavior is guided by instinct, the more susceptible it is to a mechanistic interpretation of motives. Chomsky and other linguists who defend human linguistic superiority on the basis of biology follow in the Cartesian tradition of seeing animals as biotic machines, devoid of

the innate structures of the mind necessary for the "higher" cognitive processes of memory, self-consciousness, or free-will.

Whether we claim that human superiority emanates from a more sophisticated biology or the existence of a soul, language is seen by many as proof--a physical manifestation--of the Human Element. However, this "evidence" of our uniqueness is derived from a circular form of reasoning using a purely anthropocentric set of criteria. Philosophers, theologians, and linguists who defend the notion of a unique human language define linguistic capacity in strictly human terms, looking specifically for irrefutable signs of intent or consciousness. Yet because we cannot know with certainty what, if any, intent is exhibited in natural phenomenon, intuiting motives in, for instance, the vocalizations of animals is prohibited as a means of proof. Commenting on the flaws in this line of reasoning, philosopher Donald Griffin notes that "conscious intention is ruled out *a priori* and then its absence is taken as evidence that animal communication is fundamentally different from human language" (45). In trying to fit observations of non-human nature to conform to expectations for human language, we can do little more than confirm prevailing notions of human superiority.

For most apologists for human superiority, one can only qualify for inclusion in the realm of moral beings by demonstrating the possession of the quasi-divine attribute of language. By denying that nature possesses language (and refusing even to consider the

possibility), apologists for human superiority relegate non-human life to the realm of things, making our moral obligation to them nil. This view of a real and radical difference between humanity and nature justifies as morally valid any use or manipulation of nature that contributed to human welfare. Thus, from this perspective, notes ethicist Mortimer Adler, "an inferior kind ought to be ordered to a superior kind as a means to an end; in which case there is nothing wrong about killing animals for the good of mankind" (266).

7.2 Closer to Nature and Further from Language.

In Plato's *Phaedrus*, the philosopher describes the human soul using an analogy of a chariot driven by two winged steeds, one white and the other black. The white steed, he explains, represents temperance, modesty, and all elements of humanity's higher nature. This horse is always trying to lift the soul upward towards intellectual pursuits and the realization of an ideal beauty. The dark horse, on the other hand, represents base passions and pleasures of the body, and it is constantly trying to drag the chariot down, compromising the dignity of the human soul. According to this analogy, right action is guided by the mind and spirit, and ignoble acts are rooted in human physicality. With reason as the soul's pilot, say Plato, the individual can rein in animal passions and transcend the limited material existence. Those who allow themselves to be ruled by the

body and human animality, on the other hand, degrade the soul, says the philosopher, and risk forfeiting their very humanity.

The analogy dramatizes the anxiety people feel as a result of their own animality and illustrates the propensity of people to try to distance themselves from "lowly" nature. Human affinities with nature presents humanism with a troubling paradox. The similarities between humans and other animals calls into question the contention that we are radically unique. How can humanity claim to be of a different order than nature if we share with animals certain behaviors and biology? To admit that human beings are intimately connected with nature would invalidate our claims to absolute moral and intellectual superiority. As a result, people have often violently opposed the notion of an ontological contiguity between human and non-human life by imposing rigid boundaries to demarcate the world of beings from the world of things.

The conceptual territory where this tension is most pronounced is in the culture clash between nature-based societies and Western "civilization." The response of many apologists for human superiority has been to maintain the strict division between humans and animals by denying the humanity of those individuals or cultures who exhibit an intimate affinity with nature. Under the impression that one is necessarily either human or animal, various observers have resorted to a sort of human litmus test in an effort to categorize those whose behavior or appearance presents as alien. Since language has

been perceived as the quintessential human attribute, linguistic capacity has often been used to measure an individual's or a culture's humanity.

Basing human superiority on the amorphous and mutable entity of language results in a rather a tenuous hold on power. Confronted with situations in which individuals or cultures seemed to lack language (or a "fully developed" language), defenders of humanism found that the line between humanity and nature became ambiguous and confused. For many early colonists, missionaries, and explorers, nature-based cultures seemed to be inarticulate and beast-like. Rather than impugn their own humanity by recognizing their relation these "animal-like" people, Westerners often defined indigenous peoples as patently non-human, pointing to their supposed incapacity with language as evidence of their degradation.

The accounts of explorers, colonists, and travelers regarding nature-based cultures reveal that many believed that to be closer to nature was to be further from human. When European colonizers came into contact with indigenous cultures, they frequently called them "savage" or "barbarous," not only because they found their physical appearance alien, but because they found their language unintelligible. The historian Hayden White reminds us that imbedded in the term "barbaros" is an implicit link between wildness and incapacity for language. "The Wild Man's supposed dumbness reminds us that for many Greek thinkers a *barbaros* (a term whose English derivative, barbarism, we are inclined

to use to indicate wildness) was anyone who did not speak Greek, one who babbled, and who therefore lacked the one power by which the political life could be achieved and a true humanity realized" (White 19). In countless travel diaries, histories, and anthropological treatises, European observers go so far as to categorize non-whites as semi-human or non-human, villainizing with greatest zeal those cultures which are most intimately integrated with nature.

The same notions of linguistic superiority that have been used to justify human domination of nature have, throughout history, been enlisted to justify the oppression of nature-based societies. Since the most prominent features of civility--writing, arts, law, money, technology, etc.--were often attributed to humanity's unique proficiency with language, the apparent absence of those features among different peoples was perceived as evidence that they were inferior beings. Oral cultures, especially, were perceived as "primitive" by Westerners who touted written language as the culmination of linguistic expression. Lewis Henry Morgan, a nineteenth-century pioneer in anthropology, believed that the Iroquois that he worked with existed in a state of barbarity because they had not developed a "literate" culture.²¹ Similarly, upon encountering the oral cultures of Africa, European explorers and colonizers dismissed their languages as undeveloped because

²¹See Lewis Henry Morgan's *League of the Ho-De-No-Sau-Nee, Iroquois* in which he describes how human societies progress from stages of savagery to civility.

they lacked a method for encoding speech into writing. But as Henry Gates, Jr. makes clear in *The Signifying Monkey*, African oral culture *did* have its own mode of inscription. The Odu, a body of two hundred fifty six divine lyric poems created by the god Ifa, are represented by a series of palm nut cryptograms. Yet European explorers and colonizers often ignored the versatility and richness of the vernacular in their assessment of African language. Much in the way that observers assess nature's linguistic capacity, these explorers applied their own criteria for literacy to Yoruban culture, and, when finding characteristics of writing absent, they frequently concluded that indigenous people possessed neither learning nor language.

When colonizers encountered hunting and gathering cultures, nomadic tribes, or agrarian societies they often assumed that their nature-based lifestyles were indicative of their inferior intellectual capacities. Convinced that they were dealing with people of limited mental abilities, Westerners were inclined to dismiss the unfamiliar dialects as unsophisticated gibberish. In many cases, explorers found the languages of newly met tribes so alien to their ears that they discounted it as being language at all. In accounts of American Indians or Africans, Western observers often described their speech as animal-like grunting. When traveling through Asia and Africa in 1665, Thomas Herbert concludes after listening to the speech of the people he encountered that their "language is rather more apishly than articulately sounded" (Novak 188). Similarly, the Earl of

Clarendon, in his *Miscellaneous Works*, denigrated non-Christian "savages" for their brutish language: "Their words are sounded rather like that of apes than men" (qtd. in Thomas 42). The animals of choice for most of these comparisons are monkeys and apes, but would-be anthropologists have also likened the speech of non-whites to the sounds of such animals as turkeys, pigs, and dogs, just to name a few.

The linguistic link between non-whites and animals reflected the racial biases of many observers. Many eighteenth- and nineteenth-century writers tended to place indigenous peoples farther down on the Great Chain of Being: the more intimate a culture was with nature, the closer it was to bestial. Those whose linguistic habits more closely matched Western habits were accorded greater status. Those whose syntax, inscription, or phonetics seemed alien were characterized as non-human. Writing in the late sixteenth century, Richard Hakluyt (*Divers Voyages Touching the Discoveries of America*) describes American natives as primitives who "spake such speech that no man could understand them, and their demeanor like to brute beastes" (qtd. in Nash 56). This denigration of native languages allowed many observers to justify the extensive exploitation of the colonized on the grounds that nature endowed the "inferior" races with imperfect human faculties, and thus they were entitled to fewer (if any) moral rights.

Inarticulate speech came to be associated with amorality, since the lack of speech suggested to many a corresponding absence of reason, the only faculty which allows us to

make evaluative judgements. Upon encountering non-white races, ancient travelers often described these different peoples as monstrous manifestations of God's displeasure. They were descended, theologians explained, from the archetypal sinner. Or, they speculated, these people had acquired their "aberrations" in speech and appearance from worshipping idols and false gods (White 18). The capacity for speech was for many theologians an indication of the existence of a soul. By extending this analogy, some argued that to possess an "imperfect" language was to possess an imperfect soul. In the period of European colonization, Western observers often assumed that, as evidenced by their affinity with animals, indigenous peoples did not have a human spirit and thus they warranted little or no moral consideration. Attributing animal souls to non-whites allowed colonists and conquerors to justify the most horrendous atrocities, all of which they could sanction by scripture.

In Genesis 1:28 God grants Adam "dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth." Once deemed "inarticulate," "amoral," and spiritually "inferior," natives were accorded the ethical consideration due to animals. This amounted to very little consideration indeed. Because animals were perceived as spiritual inferiors, notes historian Hayden White, "man could do with animals what he would: domesticate them and use them, or, if necessary, destroy them without sin" (White 19). Westerners' dim opinion of the linguistic capabilities of

non-whites certainly contributed to their justification of slavery, imperialism, and other moral atrocities.²² "[I]n a morally ordered world," concludes White, "to be wild is to be incoherent or mute, deceptive, oppressive, and destructive; sinful and accursed; and, finally, a monster, one whose physical attributes are in themselves evidence of one's evil nature" (White 16).

Not only was inarticulate speech a sign of wildness, but some believed that contact with the wilderness could actually erode one's capacity to speak. In the opinion of many Renaissance and Enlightenment thinkers, the faculty of speech was stunted or perverted by intimate contact with nature. In the seventeenth century, some would-be linguists speculated that prolonged periods of solitude in nature could result in the atrophy of speech. In *Of the Origin and Progress of Language*, James Burnett, Lord Monboddo, described human progress from a state of speechlessness to literacy as a matter of evolution, and, as such, the process was liable to devolution. Alexander Selkirk, the model for Robinson Crusoe, "was reported to have almost lost the use of language after three years on his island" (Novak 194). Contact with the wilderness, commentators

²²The practice of demonizing an individual or group by associating it with animals exists in a variety of forms in contemporary culture. One of the most common expressions of this sentiment is the tendency to call criminals "beasts" or "monsters." In doing so, society re-categorizes the person as non-human, justifying our punitive or violent acts like the death penalty that transgress normal human rights.

speculated, had either diminished his linguistic capabilities or repressed their development altogether.

This perception of wilderness as debilitating was reinforced by pre-modern assumptions that one's environment significantly altered human emotional, physical, and mental conditions. Commenting on the colonists' adjustment to America, historian John Canup notes that "Classical humoral physiology assumed that human beings were in many ways creatures of the climate in which they lived" (10). This notion, says Canup, led many to conclude that transplanted Europeans would inevitably take on characteristics of their environment--the air, water, food etc.--which daily shaped them. Commenting on the progress of British colonization, seventeenth-century writer Nathanael Carpenter reported that English cattle and crops had been "translated" by the American environment and were greatly altered by their immediate surroundings.²³ Compelled by their fears of the transformative force of the untamed frontier, the Puritan government enacted a law in 1635 requiring colonists to build within a half mile of a meetinghouse so the expansion into the wilderness could be kept in check (Canup 50).

²³The choice of the term "translated" suggests that the once familiar English cattle are transformed or translated by nature into something alien and unfamiliar. If we extend the linguistic metaphor, nature, inarticulate and dumb, translates the cows into its own wild and uncoded terms--redefining and reclaiming the creatures with a foreign tongue inscrutable to English farmers.

For the Puritan colonists, living in such close proximity to vast regions of ungoverned space and un-Christian "savages" threatened to bring out the most base elements of human nature. Colonists were worried about the advance of the inner wilderness, and felt that the untamed environment might induce some to give expression to their animal urges. John Winthrop worried that an untamed continent afforded a degree of unchecked liberty that would make men "grow more evil, and in time to be worse than brute beasts." Colonial minister Cotton Mather, like many theologians of his day, believed that human existence involved a struggle between the human and bestial elements of our nature. Mather obsessed over his battle with his inner "beast" and wrote in his diary of his sense of debasement upon recognizing a close correspondence between himself and an animal:

I was once emptying the *Cistern of Nature*, and making *Water* at the Wall. At the same Time, there came a *Dog*, who did so too, before me. Thought I; "What mean, and vile Things are the Children of Men, in this mortal state! How much do our *natural Necessities* abase us, and place us in some regard, on the same Level of the very Dogs!" (Mather 1:357)

From that moment on he resolved to lift his mind to "some holy, noble, divine Thought" whenever he felt himself giving expression to his more animalistic nature. For Mather, biological existence threatened to usurp spiritual existence. As defense against this unconscionable possibility, it is as if Mather resolves to exercise thought and reason--

noblest of human faculties--as a talisman against the impinging forces of his own animality. To Mather, Winthrop, Wigglesworth, and numerous other Puritans, one need only look at the Indians for an example of the corrosive effects that wilderness exerted on the human spirit.

The Age of Colonization re-ignited speculations about the existence of a wild man, a being located somewhere between apes and humanity in the scheme of creation. The notion of a wild man is at least as old as Western culture, belonging to "a set of culturally self-authenticated devices which includes, among many others, the ideas of 'madness' and 'heresy' as well" (White 4). The savage represents animality, wildness, and a host of other ideas antithetical to humanity and civilization. For some theologians, the wild man myth was a manifestation of their suspicions, incited by scripture, that corruption of species was possible as a result of bestiality. Others like Augustine believed that "savage" races may be outcasts from God's good graces. Early evolutionists searching for the missing link between the human species and other primates often tried to force indigenous peoples into this niche, attributing to them aspects of both animal and human physiologies. (Some eager and misguided scholars even went so far as to report the existence of tribes who possessed vestigial tails.) For whatever reason, throughout periods of colonial expansion Western observers discounted the humanity of non-whites by claiming that they were living examples of the mythic wild man.

In some circles of society, the status of the wild man was slightly improved. Primitivists like Rousseau, Diderot, and Voltaire became enamored with the idea of finding a human individual or culture that had developed in relative isolation from the taints of society. Being connected to nature was seen as a positive characteristic, because it implied that one had escaped the hazards of indoctrination into the vanities and vices of society. An early popularizer of the primitivist sentiment, Jean-Jacques Rousseau, wrote a treatise on human social development entitled *Discourse on the Origin of Inequality* as a critique of numerous oppressions born of institutionalized materialism. Rousseau's interest in the evolution of human society was part of a larger movement in the eighteenth century to examine the flaws in European cultures by understanding conditions in more "primitive" societies. He dreamed of a society free of the trappings of corrupt civility, where latent virtues he felt were innate in every human were allowed to flourish unchecked. The setting for the rejuvenation of the species is nature, where, stripped of all artifice and convention, the human soul is allowed to attain its true perfection.

At first glance, primitivists' notions of a noble savage seems to contradict the prevailing perspective of nature-based cultures as savage and inarticulate. But, as Geoffrey Symcox makes clear in his essay "The Wild Man's Return," Rousseau identifies in his natural man many negative aspects of savagery which he found neither noble nor *human*. Rousseau's theory of social evolution involved four distinct stages, only one of

which he deems worthy of emulation. His vision of man in nature, particularly in the early stages of development, notes Symcox, includes many of the negative characteristics that his contemporaries attributed to "barbaric" indigenous cultures. Believing that societies progress by degree, Rousseau speculates in *Discourse on the Origins of Inequality* that people in the initial stages of cultural development were largely guided by physical or emotional desire. Like those who claimed indigenous people lacked reason, Rousseau describes an early stage of natural man where passion dominates over rationality. In the first stage, humans possess the potentialities for humanity, but lack reflective thought and reason, heeding only immediate physical demands. Like other animals, humanity at this stage was morally neutral, knowing neither good nor evil. As Symcox points out, this earliest stage of Rousseau's noble savage draws heavily on the wild man myth. The mute spontaneity, non-rationality, and unchecked passion of Rousseau's early man suggests a strong kinship between man and the rest of the animal kingdom. While Rousseau rejected the notion that we were evolved from lower species, he did allow that humanity and apes may have a common ancestor, traced back to early stage of human evolution. In this earliest stage, humans were, according to Rousseau, without a social life and individuals lived a solitary, roving existence.

In the second stage of development, humanity begins to form small social groups, and emotion and empathy constituted the primary drives for social cohesion. Obligation to

fellow humans was based on self-interest rather than morals, since at this stage mankind had no sense of good or evil. Rousseau's descriptions of amoral man echoes earlier pronouncements by theologians which denied full humanity to various indigenous peoples. For Rousseau, the natural man who was guided by emotions and physical drives was still a brutish creature:

Rousseau did not idealize this early man: he may not have been bad at this stage, but neither was he particularly good or noble. The basis of his feelings was the animal instinct and sympathy or pity for his fellows, which led him to adopt as a general rule of conduct, "Do what is good for yourself, with the least harm to others." The second epoch of man's development was therefore marked by defects almost as great as those in the first stage; man was still largely unformed and lacking in the qualities which would make him truly human. (Symcox 241)

It is not until the third stage of development that humanity emerges as fully human. Here, reason is balanced by emotion, and human society allows for both social cohesion and individual identity. Guided by reason, the expression of human emotion gives rise to arts such as music, poetry, and dance. Rousseau regrets losing this stage the most, for at this level, humanity was able to strike "a good balance between the indolence of the primitive state and the fervid activity of our own vanity." Thus, says Rousseau, it "must have been the happiest and most enduring age" (62). But no golden age can last and this

level of development, says Rousseau, gave way to an age of materialism as humanity's new self-consciousness engendered pride and, ultimately, self-aggrandizement.

Inequality arises in this fourth and final stage as the result of a trend towards self-interested acquisition of property. Inequality, argues Rousseau, is the impetus for conflict, political oppression, and a host of other repressive institutions.

Those who romanticized nature-based peoples held in mind a vision of these societies that bore little resemblance to their actual cultures. Most of these early anthropological treatises were founded upon distorted accounts of indigenous cultures sent back by missionaries or mercantile adventurers whose continued funding and support often depended upon assurances of the tractability of the local people.²⁴ Seeking a palliative for the increasingly inequitable distribution of wealth and power in imperial Europe, many primitivists turned to reports of idyllic societies for inspiration.

Rousseau's noble savage is primarily a representation of a psychological or social state rather than a commentary on actual indigenous peoples and their relationship to nature. Rousseau was more interested in the potential goodness within all humans--their

²⁴Symcox describes how the seventeenth-century Jesuit authors of *Relations*, a series of progress reports on the conversion of Canadian Indians, primarily addressed their text to benefactors. Not only did they want to assure the sponsors that they were working diligently to convert souls, but "there was a further reason for presenting potential converts in a favorable light: funds contributed to the missionaries would accomplish the worthy task

"perfectibility"--than in ideal nature-based societies. Symcox suggests that the noble savage is not a real nature man, but a reconciliation of the savage and civil man within:

Consciously or unconsciously, Rousseau was reverting to an older tradition which, although largely submerged by the newer ideal of rational virtue, had never entirely disappeared. He internalized the Wild Man and recognized his presence within himself, a presence which he felt was good and necessary. He came to realize that the Wild Man exists within us all, even though we may prefer to regard ourselves as noble savages: below the civilized overlay of reason and balance lies a deeper substratum of feeling inherited from a primitive past. Rousseau's rediscovery of the Wild Man was the uncovering and rehabilitation of the realm of feeling, which he instinctively felt was essential to an understanding of man and society, and without which social life could not be tolerable or fulfilling. (Symcox 234)

Rousseau's noble savage was a "dynamic model" of human nature which carefully blended the best aspects of the rational man and the more primitive and vital qualities of the emotional man.

Like many of his contemporaries, Rousseau identified language as the pivotal development in human society, the one attribute that distinguished mankind definitively

of bringing these already noble savages to the final stage of earthly perfection by teaching them the true religion" (227).

from the animal kingdom. Language did not develop as a result of human immersion in nature, but as a consequence of his removal from it into society. The first human words, conjectures Rousseau, probably evolved out of a need for social cohesion where, when faced by threatening situations in nature, an individual instinctively cries for help from others of his kind:

Man's first language, the most universal and forceful language, and the only one he needed before he had to persuade gatherings of other men, was the cry of nature.

Because this cry was wrenched from him only by a kind of instinct in times of acute urgency, to plead for help in great perils or for relief from terrible afflictions. (39)

Instinctual cries gradually became a sophisticated system of communication which allowed for the development of communal bonds, a necessary precursor to family life and the eventual rise of nations.

Rousseau believed that nature drove individuals together and language resulted from their mutual efforts to survive in the state of nature. This is not to say, however, that Rousseau believed that language was purely a product of human creation. Like other theologians and philosophers who have addressed the issue of human language, Rousseau agrees that speech is uniquely human, and he suggests that linguistic capabilities may be divinely implanted. Upon considering the age-old conundrum of whether language invents society or society invents language, Rousseau admits to being convinced of the

"impossibility that languages could have been created and established by purely human means" (42). In keeping with conventional wisdom of human superiority, Rousseau denies that language exists outside the human species: "Furthermore, general ideas can be introduced into the mind only with the help of words, and the understanding grasps them only through sentences. This is one of the reasons why animals cannot formulate such ideas or acquire the perfectibility that depends on them" (41).

Contrary to what one might be led to expect from Rousseau's romanticization of noble savages, nature is not the impetus for his nobility; it merely provides an environment for human development that is removed from the corrupting influences of materialistic civilization. Language is still perceived as the exclusive privilege of humanity, and linguistic proficiency develops in response to hostile forces in nature which threaten human survival. Rousseau's primitivism does not idealize human harmony with the natural world, for only by separating from nature to develop the faculties of language and reason does the human species attain full humanity. Instead, Rousseau's perspective of nature is defined by humanist assumptions which ultimately place humanity above and outside of nature.

7.3 The Moral Implications of Speaking for Nature

It is no wonder that philosophers and theologians of various ages and cultures have jealously guarded humanity's claim to language. By attributing speech to nature, the advocate erases a conceptual boundary between man and beast, effectively re-defining humanity as a member of nature as opposed to master over it. Within the rhetoric of advocacy, attributes such as reason, imagination, and consciousness which are normally the exclusive prerogative of humanity are ascribed to the rest of nature. The rhetorical move has a sort of leveling effect, where qualitative value is dispersed to all speaking subjects, be they wolves, trees, or the Earth itself. Re-constituted as a political, speaking entity, nature lays claim to ethical considerations previously reserved for humanity.

There is a great deal at stake in denying language to animals, since for many language has been used to demarcate a radical difference between humanity and nature. To invalidate that hierarchy established by language would impugn, a posteriori, almost all of humanity for acts of oppression and destruction committed against the rest of the natural world since time immemorial. Furthermore, it would demand a comprehensive restructuring of existing philosophies which guide current human conduct towards nature.

As a result, attempts to attribute language to nature and elevate its moral status relative to humanity have been vigorously opposed. According to natural historian, Keith Thomas, "In the eighteenth century educated writers became increasingly hostile to anthropomorphic stories in which animals behaved like human beings, urging that 'all

fables which ascribe reason and speech to animals should be withheld from children, as being vehicles of deception" (127). It is "deceptive," the argument goes, to assume that animals have language because such a determination cannot be made rationally.

According to Thomas, "Jacobean lawyers maintained that anyone who thought that birds and beasts could converse like characters in Aesop should be legally written off as an idiot" (127).

In his book *The Question of Animal Awareness*, Donald Griffin outlines a hierarchy of acceptable pronouncements concerning animal communication, noting that Western society has a long history of resisting any attempts to impart intentionality to the "voice" of nature. Under the influence of the behavioral sciences, it has become increasingly acceptable to believe that animals communicate, although clumsily, through a system of predetermined patterns of recognition (though not "language"). However, it is taboo to interpret any communicative behavior in non-human creatures as an expression of free will or consciousness (see Figure 1 below). Attributes such as intentionality and conceptual thought have been the exclusive domain of humanity, and to ascribe them to non-human life would not only violate rules of scientific validity, but would elevate dramatically the moral value we must recognize in the animal kingdom.

Language is the one quality that sets humankind apart from nature as worthy of ethical consideration. To interpret animal behavior as language that demonstrates

intention would challenge the legitimacy of all moralizing based upon humanistic premises. If, for example, it were to be discovered that an animal, say a dolphin, possessed its own form of language, then we would have no basis for asserting a *qualitative* difference between humanity and animals. Ethologist Dr. John Lilly suggests that if dolphins were to be found capable of propositional speech, "some groups of humans [would] . . . insist that we treat them as humans and that we give them medical and legal protection" (211-12). The notion of a "speaking nature" would create "a legal, ethical, moral, and social problem" for humanity by undermining our assumption of superiority.

O.K.

	PATTERN RECOGNITION
	NEURAL TEMPLATE
	SOLLWERT ²⁵
	SEARCH IMAGE
	AFFECT
	SPONTANEITY
	EXPECTANCY
	COVERT VERBAL BEHAVIOR
	INTERNAL IMAGE
	CONCEPT

²⁵In a cybernetic concept of awareness, a sollwert is "the value of a sensory input which the animal tends to keep constant by adjustments of its behavior" (Griffin 83).

	UNDERSTANDING
	INTENTION
	FEELING
	AWARENESS
	MENTAL EXPERIENCE
	MIND (MENTAL)
	THOUGHT
	CHOICE
	FREE WILL
	CONSCIOUSNESS

TABOO

Figure 1. Gradient of Acceptability Concerning Terms Applied in Behavioral Sciences. From Donald Griffin, *The Question of Animal Awareness*, 58.

The rhetoric of advocacy deals with the taboo, interpreting the behaviors of animals and even the phenomena of nature as language. More threatening, however, is the tendency of the advocate to ascribe consciousness and intent to non-human nature. By depicting animals or nature in general as sentient or willful, the advocate simultaneously argues that nature possesses something comparable to the human attributes of soul or intellect. As a result, the language of the advocate is suppressed within a humanist culture on the charge that it is irrational, over-sentimentalized, confrontational, or disruptive.

The notion that humanity differs only superficially in kind or by shades of degree, raises some disconcerting moral dilemmas for humanists. The ability of nature advocates

to discern in the various behaviors of animals evidence of conscious intent suggests that human language is not unique, but just one of myriad expressions of language. Implicit in the trope of speaking nature is the assertion that humanity differs in degree and that there is a direct line of continuity between all forms of language and life. For proponents of this view, intermediate levels of linguistic proficiency are possible, and in comparing humanity to animals both possess common linguistic attributes, but one surpasses the other demonstrably in a few areas. If linguistic capabilities varied from the lowest forms of life to humanity along a contiguous spectrum, human speech would just be a different manifestation of language in the animal kingdom. Instead of possessing a unique capacity for speech, humans could merely be said to exhibit a more sophisticated mode of vocal and written articulation than other language users in the animal kingdom. Drawing on the associations between linguistic capacity and moral status, the advocate uses the image of speaking nature as a metaphor to advance the subversive proposition that humanity and nature differ in degree only. If taken to its logical conclusion, the idea of a speaking nature implies that we have no basis for justifying our exploitation of non-human life. "I would say," speculates the ethicist Mortimer Adler, "that if man differs only in degree from other animals, then a sharp line cannot be drawn to separate the world of persons from the world of things; in fact, the distinction between person and thing becomes meaningless or at best arbitrary if there are only differences in degree,

since that distinction is either a distinction in kind or no distinction at all" (257). Because the rhetoric of advocacy re-envision nature as a continuum of life which *includes* humanity, it suggests that we have no normative principle for ascribing rights to humans and not to animals. If language gives an entity its moral value, in the language-rich world posited by the advocates ethical value would be imparted to all beings along the continuum.

Giving language to nature has broad implications for our world view. The nature advocate challenges the assumption that humanity is the highest manifestation of value in the universe. Nature representatives seek to displace humanity as the measure of all things and implement a more egalitarian "biocentrism" in which ethical value is accorded to the entire community of living and non-living entities. Broadly defined, biocentrism is a way of seeing the world in which the integrity of the Earth and its ecosystems is valued above the satisfaction of the material desires of one species--humanity. Humans, animals, plants, micro-organisms, rivers and mountains, and all components of a life system constitute a community, all members possessing a degree of ethical standing. From this perspective, determinations of what is "good" or "ethical" are made by assessing the impact of actions on the viability of a whole biotic community or the globe.

Biocentrism, also called Deep Ecology,²⁶ "is not so much an attempt to fabricate a relationship between humanity and nature based on philosophical principles it holds dear, as it is a response that flows from a relationship that already exists and that has moved increasing numbers of people to resist in thought and deed what is happening to our environment" (Manes 140). In other words, biocentrism is a way to give theoretical form to the sense of affinity that people feel with the natural world. For many nature advocates, biocentrism is an ethic which develops out of their own sense of reverence for non-human life. Because they identify strongly with nature, they are inclined to see lines of continuity between themselves and non-human nature, and many advocates describe the human species as simply one component of a living web. Biocentrists argue for exercising restraint in our dealings with nature on the assumption that our self-serving manipulation of the environment will ultimately unravel the fragile threads which tie species to species and ecosystem to ecosystem.

Lynton Caldwell suggests in the book *International Environmental Policy* that biocentrism constitutes a sort of second Copernican revolution in which, by recognizing our membership in nature's community, we may be compelled to abandon our long-

²⁶Deep Ecology is a term coined by Norwegian philosopher Arne Naess. In 1973, Naess wrote in his article "The Shallow and the Deep, Long Range Ecology Movement" that society needed to fundamentally revise the way it related to nature. He advocated a

cherished notions that we are the center of the moral universe. The rhetoric of advocacy contributes to this biocentric "revolution" in that it shifts the moral center of gravity from the human species to the natural community at large. Like the first Copernican revolution, this second biocentric revolution is an act of re-definition in which the terms we use to explain the universe are altered to facilitate a new way of seeing. By re-defining language as an essential expression of nature and not the limited faculty of one species, advocates make it possible to perceive the wailings of a lab animal, the disappearance of a species, or the death of a river in moral as opposed to strictly physical terms.

While the terms "biocentrism" and "Deep Ecology" were coined in the latter twentieth century, many nature advocates of earlier generations recognized the destructive effects of anthropocentrism and worked diligently to invalidate and dismantle the humanist ontological hierarchy. For Thoreau, the notion that the whole world existed for the sole benefit of humanity was an affront to what he saw as the intrinsic spiritual and aesthetic value manifest in all forms of life. Writing about his travels to Chesuncook Lake in 1853, Thoreau protests against the selfish utilitarianism exhibited by the various profiteers who flocked to the wilderness in search of resources:

"deep" perspective in which human conduct was guided by an assessment of the long range ecological and moral ramifications of our actions.

Strange that so few ever come to the woods to see how the pine lives and grows and spires, lifting its evergreen arms to the light--to see its perfect success, but many are content to behold it in the shape of many broad boards brought to market, and deem *that* its true success! But the pine is no more lumber than man is, and to be made into boards and houses is no more its true and highest use than the truest use of a man is to be cut down and made into manure. There is a higher law affecting our relation to pines as well as to men. A pine cut down, a dead pine, is no more a pine than a dead human carcass is a man. Can he who has discovered only some of the values of whalebone and whale oil be said to have discovered the true use of the whale? Can he who slays the elephant for his ivory be said to have 'seen the elephant'? These are petty and accidental uses; just as if a stronger race were to kill us in order to make buttons and flageolets of our bones; for everything must serve a lower as well as a higher use. (*Maine Woods* 134-35)

While Thoreau does not demand that lumbermen lay down their axes and hunters their guns, he does insist that human conduct towards nature be guided by ethical and not simply material considerations. There is, explains Thoreau, "a higher law affecting our relation to pines as well as to men." By suggesting that trees be accorded a right to exist, Thoreau initiates a radical re-ordering of the moral community to include nature. Drawing a comparison between pines and humans, Thoreau equates the indiscriminate pillaging of

nature with senseless murder, suggesting that nature, as an embodiment of spirit, shares with humanity a special dignity. "It is not their bones or hide or tallow that I love most," says Thoreau. "It is the living spirit of the tree, not its spirit of turpentine, with which I sympathize, and which heals my cuts. It is as immortal as I am, and perchance will go to as high a heaven, there to tower above me still" (*Maine Woods* 134-35).

For many in the realm of science and industry, the indeterminacy of non-human nature's ethical status is sufficient cause to treat it as amoral, inanimate matter. For John Muir, however, our inability to tell with certainty if nature possesses consciousness and will is all the more reason to treat it with reverence, since it may be much closer to humanity than we are willing to admit. In his book *A Thousand Mile Walk*, Muir speculates that plants may in fact be sentient. "How little we know as yet of the life of plants," observes Muir, "their hopes and fears, pains and joys" (19). One may look at the way that roadside plants withdraw from traffic and abuse, says Muir, as "evidence of feeling." Like current-day biocentrists, Muir argues that humans are not the highest manifestation of life, but only part of a vast web of nature. Compared to "other things in God's creation," says Muir, "[we] all are only microscopic animalcula" (*Thousand Mile Walk* 103). Humanistic hubris, warns the naturalist, may lead us to condemn God as an imperfect maker when all creation does not serve us exactly as we would like: "The world, we are told, was made especially for man--a presumption not supported by all the

facts. A numerous class of men are painfully astonished whenever they find anything, living or dead, in all God's universe, which they cannot eat or render in some way what they call useful to themselves" (*Thousand Mile Walk* 139). Foreshadowing the biocentrists of the twentieth century, Muir places value on all life and promotes the well-being of the whole community over the self-serving interests of the individual member.

Beginning from a more biocentric perspective, Muir is able to account for "facts" of nature which cannot be explained by the humanist point of view. While humanism has no way to evaluate anything which does not serve our well-being, biocentrism completely changes the terms we have at our disposal for defining "worth" in order to assess the value of nature independent of human economic measurements. Like Thoreau, Muir is critical of those that see plants and animals strictly as functions of human utility. He scoffs at the idea that all things dangerous to mankind are evil, and submits instead that all life has value *as life* and not as human resource: "It never seems to occur to [some people] that Nature's object in making animals and plants might possibly be first of all the happiness of each of them, not the creation of all for the happiness of one. Why should man value himself as more than a small part of the one great unit of creation?" (*Thousand Mile Walk* 139).

The nature advocate who is most responsible for codifying an anti-humanist environmental ethic is Aldo Leopold. In *A Sand County Almanac*, Leopold outlines a

"land ethic" to counter the destructive effects of institutionalized anthropocentrism. To Leopold, ethics are founded upon the premise that "the individual is a member of a community of interdependent parts" (239). However, human society, which has historically seen itself as radically different from nature, has yet to formulate an ethic for relating to nature because it was considered outside the bounds of the moral community. "The land ethic," explains Leopold, "simply enlarges the boundaries of the community to include soils, water, plants, and animals, or collectively: the land" (239). Since linguistic capacity has traditionally been used to establish the boundaries of community, advocates enlarge that territory by extending language to the whole of nature. Once nature is re-constituted as a moral being, human desires must be weighed the "social good" of the biotic community. "In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such" (240). According to the re-ordered priorities of biocentrism, humanity has an obligation to set aside narrow self-interests if our conduct threatens the existence or habitat of other members in the community.

The changes required to move contemporary society from a humanistic ethic to a biocentric one, explains Leopold, will entail the creation of an entirely new "social conscience." "No important change in ethics," observes the naturalist, "was ever

accomplished without an internal change in our intellectual emphasis, loyalties, affections, and convictions" (Leopold 246). By investing nature with voice, the advocates are effecting just such a cultural re-alignment; the trope of speaking nature is more than just a fanciful anthropomorphism intended as a mouthpiece for environmentalist ideology. In speaking for nature, the advocate is *describing reality* as it appears from a biocentric perspective, where all members of the community have value or "spirit." Writers like Thoreau, Muir, and Leopold work against prevailing humanist sentiments to create a space in the social discourse where it is possible to identify with nature, subtly transforming "loyalties, affections, and convictions" along biocentric lines. To return to the example from cosmology, the effort of advocates to define nature as a moral entity amounts to the conceptual equivalent of Copernicus explaining the motions of the heavens to a geocentric-minded society in heliocentric terms.

Humanists of various strains have resisted the efforts of advocates to invest nature with voice because it promotes a perspective in which the power and authority of the human race are severely diminished. Yet, like the first Copernican revolution, this second revolution of world views stands up against the criticism of competing perspectives because it has broader explanatory powers and improves our understanding of humanity's place in the universe. Humanism addresses how we should relate to one another, but fails to adequately describe our obligation to the rest of the world. By

defining the "good" as strictly the human good, humanism leads to self-destructive behavior that, ultimately, proves the theory to be self-refuting. Motivated by self-serving interests for short term gains, humanity has generated enormous amounts of pollution and severely curtailed nature's regenerative capacity, threatening the well-being and existence both human and non-human life.

Because biocentrism conceives of humanity as one component of a complex living system, it can offer us guidance regarding right conduct as members of the whole biotic community. While values are a human creation and nature out there may not possess the exact human quality of "dignity" we ascribe to it, the only way we can apprehend the world conceptually is through such metaphors. As environmental historian Christopher Manes points out, "nature of course does not need ethics, but we do, and the ethics that [allow] us to live in a satisfactory relationship with nature (and hence ourselves) [require] that we extend values and rights to the natural world" (147). The value of a metaphor like speaking nature is its ability to enhance our understanding of the rest of the world for the purpose of survival. For the nature advocates, apprehending our world as an animate community of interconnected relationships will have far better results for humans and nature than conceiving of the physical world as latent material wealth.

CHAPTER VIII

ADVOCACY'S CHALLENGE TO SCIENTIFIC RATIONALISM

Heavily influenced by scientific rationalism and humanism, contemporary notions of nature conceive of non-human life as an inferior form of existence or as biological clock work, devoid of qualitative value. In speaking for nature, advocates are simultaneously preserving the wilderness and effecting an epistemological transformation necessary to alter the notions that encourage environmental destruction in the first place. Reacting against the pervasive positivist spirit of Western civilization, conceptualized in the Enlightenment and manifested in the Industrial Revolution, nature advocates argue for the reintegration of intuition and experience into human knowledge. Whereas the positivist outlook prevalent in science confers "truth" upon only those things which are quantifiable, the advocate considers feelings and beliefs valid forms of "evidence." Rejecting the notion that truth is either objective or subjective, nature advocates describe knowledge and truth arising out of the interaction of the observer and the observed, a process that is necessarily facilitated through language. The aims of the rhetoric of advocacy are to replace a destructive mechanistic world view with a primarily rhetorical concept of meaning in which truth is seen as essentially transactional.

8.1 Scientific Rationalism and the Mechanistic Model of Nature

The rise of science and the mechanistic world view had its origins in the Renaissance when broad humanistic learning coupled with a variety of revolutionary discoveries about the nature of the physical universe led many to question the validity of received wisdom. With the astronomical and mathematical discoveries of Galileo in the late sixteenth and early seventeenth centuries, the objective principles of modern science become firmly established. Through the process of experimentation, Galileo postulated that nature could be an object of certain and quantifiable knowledge. This materialistic approach to nature inspired a mechanical model of the universe where all observations could be explained by applying mathematical principles to the motions of matter. When applied to humanity, the mechanistic model inspired a division between mind and matter, since mind was ultimately an unmeasurable entity. Working within the objectivist principles they inherited from Galileo, thinkers like Spinoza, Newton, Leibniz, and Locke described human minds as "a class of beings outside nature" (Collingwood 103). As a result of the intellectual achievements of the likes of Galileo and Newton, reason and the scientific method became the twin pillars of the dominant epistemological paradigm for the eighteenth century, dubbed, appropriately enough, the Age of Enlightenment.

The Enlightenment vision of the physical world constituted a significant departure from the Greek organic cosmology, where the Earth was perceived as a living organism. The notion that nature may be sentient or even willful was acceptable within many cultures of ancient Greece. According to intellectual historian R. G. Collingwood, "Greek natural science was based on the principle that the world of nature is saturated or permeated by mind. Greek thinkers regarded the presence of mind in nature as the source of that regularity or orderliness in the natural world whose presence made a science of nature possible" (3). Elements of nature were often described as exhibiting rationality, and thus it was easier for humanity to feel a psychological and physical kinship to non-human nature. Most classical accounts of the natural world conceive of the Earth as an organism composed of self-motivated organisms. For the Greeks "This living and thinking body was homogenous throughout in the sense that it was all alive, all endowed with soul and with reason; it was non-homogenous in the sense that different parts of it were made of different substances each having its own specialized qualitative nature and mode of acting" (Collingwood 112).

In her study of natural history, *The Death of Nature*, Carolyn Merchant describes how, from pre-classical times to the Enlightenment, a predominantly feminine and organic model of nature was replaced by a masculine and mechanistic cosmology. According to Merchant, Western culture has a rich history of distinctively organic and

female-centered cosmologies, dating back to pre-agricultural societies and classical Greek and Roman cultures. Stoics viewed the earth as an intelligent organism, and writers like Pliny and Ovid argued that plundering the earth was like a violation of its "body." Prior to the Enlightenment, the earth was commonly represented as a vital, sentient organism. Organicism conceived of the world as a "person-writ-large," notes Merchant, whose body was both sensitive and self-conscious. Within the whole of nature, each part has its separate existence but performs an indispensable function for the aggregate body. From this perspective, humanity, as a component of nature, possess attributes common the whole of nature; thus, since humanity has reason and will, it is assumed under the organic model that non-human nature possesses these same qualities.

By the Enlightenment, male-centered models had largely replaced the organic concept of nature, and scientists began to order the world in hierarchal terms:

Mechanism, which superseded the organic framework, was based on the logic that knowledge of the world could be certain and consistent, and that the laws of nature were imposed on creation by God. The primacy of organic process gave way to the stability of mathematical laws and identities. Force was external to matter rather than immanent within it. Matter was corpuscular, passive, and inert. . . Because it viewed nature as dead and matter as passive, mechanism could function as a subtle sanction

for the exploitation and manipulation of nature and its resources" (Merchant, *Death of Nature* 102-3)

The transition from seeing nature as a community to a subject of domination created a nature-culture split, where humanity, and particularly males, were seen as above and outside of (female) nature. Women were associated with nature, says Merchant, and were "perceived to be on a lower level than culture, which has been associated symbolically and historically with men" (*Death of Nature* 144).

Under the influence of the mechanistic model, nature became a thing--devoid of intellect and life--as opposed to a being. Building on the Christian notion that God was the supreme architect of nature, Bacon, Newton, Descartes, Hobbes, Boyle, and others described the physical world as an assemblage of parts held together by a variety of absolute laws. When scientists began identifying these principles of nature, it greatly increased humanity's sense of its own power, observes Collingwood, "for it taught him that scientific laws established by him on earth would hold good throughout the starry heavens" (98). The physical universe became an object of spatial and temporal quantities, and that which was not scientifically measurable by these quantities was deemed unknowable. In the mechanistic model, the force which drives nature is seen as something external to nature itself, be it God or natural laws. Hobbes argued that nature did not possess any motivating force itself, but was inert matter set in motion by God.

Organicism's explanations of nature which proceeded from the assumption that nature was sentient and self-motivated had to be discarded because they were seen as speculations on unknowable qualities, generated from intuition and thus unverifiable by empirical methods.

Francis Bacon was one of the earliest promoters of the mechanistic view. The scientist must strive, said Bacon, "to establish and extend the power and dominion of the human race itself over the universe" (qtd. in *Ecological Revolutions* 127). The early contributors to the mechanistic model described nature as inert matter and the world as a manipulable biological clock:²⁷

The mechanistic construction of nature is based on a set of ontological, epistemological, methodological, and ethical assumptions about "reality." First, nature is made up of discrete particles (atoms or later subatomic particles). Second, sense data (information bits) are discrete. Third, the universe is a natural order, maintaining identity through change, and can be described and predicted by mathematics. Fourth, problems can be broken down into parts, solved, and

²⁷The will to control nature was not lone creation of science. As Merchant points out, the notion of dominating the earth was a component of both Christianity and classical philosophy. "But, as the economy became modernized and the Scientific Revolution proceeded, the dominion metaphor spread beyond the religious sphere and assumed ascendancy in the social and political spheres as well" (*Death of Nature* 3).

reassembled without changing their character. And fifth, science is context-free, value-free knowledge of the external world. (Merchant, *Ecological Revolutions* 199)

Within this analogy, humanity plays the part of tinkering clock maker capable of constructing and deconstructing the physical world. For various prominent Enlightenment philosophers, humanity's power over the physical world derived from reason, which afforded mankind with "untainted" knowledge of the guiding laws of the universe as well as the means for manipulating the external world.

Furthermore, the shift from an organic cosmology to a mechanical one installed mankind as the hierarchal head of all life forms. Whereas life was the centerpiece of organicism, the human clock maker is the center of the mechanistic model. As a result, things natural became de-valued and things "human" privileged. Since sensual experience and emotion were associated with animal passions, these faculties were deemed inferior to those attributes which were thought to be the exclusive prerogative of humanity. With the rise of science, the "masculine" faculty of reason gained ascendancy as the principle mode of human perception. The exercise of reason was more in keeping with a hierarchical world view, observes Merchant, since fact and physical laws were stable and predictable, affording humanity greater control over nature's processes:

In the mechanical world, order was redefined to mean the predictable behavior of each part within a rationally determined system of laws, while power derived from

active and immediate intervention in a secularized world. Order and power together constituted control. Rational control over nature, society, and the self was achieved by redefining reality itself through the new machine metaphor. (*Death of Nature* 193)

Within this new "machine metaphor," women and nature occupied a position subordinate to man. Physiologically women were associated with nature for their reproductive powers; intellectually, women were deemed inferior because they were associated with non-rational approaches to knowing. Within the male-mechanistic cosmology, observes Merchant, the conceptual link between women and nature resulted in a host of misogynistic cultural practices. Women, like nature, were objectified and exploited for the benefit of a patriarchal society.

The shift to a mechanistic model lifted many of the moral barriers implicit in the organic model that had prevented exploitation. Prior to the rise of science, the practice of attributing consciousness and will to nature in the organic cosmology had afforded it the ethical considerations extended to any sentient being:

The image of the earth as a living organism and nurturing mother had served as a cultural constraint restricting the actions of human beings. One does not readily slay a mother, dig into her entrails for gold or mutilate her body, although commercial mining would soon require that. As long as the earth was considered to be alive and

sensitive, it could be considered a breach of human ethical behavior to carry out destructive acts against it. (*Death of Nature* 3)

As this organic perspective was gradually replaced with the mechanical model of science, the old taboos against "offending" nature were removed, and nature was increasingly plundered for commercial gains. "This clocklike mathematical cosmos," observes Merchant, "created and repaired by an external engineer, sanctioned the human domination of nature through machine technology, experimentation, and mathematical prediction and control" (*Ecological Revolutions* 128).

The way we describe nature simultaneously reflects and constructs our notions of the external world. As Carolyn Merchant, Annette Kolodny, Keith Thomas and other environmental historians have noted, language has been intimately connected with human domination of nature. The transformation of nature from an organic being to an inanimate collection of parts was facilitated through discourse. With the change of cosmologies, nature has systematically been re-defined to conform with an objectivist perspective. For instance, prior to the Scientific Revolution, plant names were anthropomorphic, fanciful, localized, coarse, sentimental, and expressive. Included in the English vernacular are names like dead man's fingers, catsfoot, cuckoo flower, or ladies' bedstraw. Such nomenclature was highly mutable and resisted regularization. What's more, they suggested an intimacy and sympathetic affinity between humanity and nature.

But scientists and merchants found the popular names too unstandardized and whimsical and sought to generate a predictable nomenclature in order to facilitate taxonomy--a game of linguistic control.

Furthermore, market economics favored a rational approach to cataloging nature, and "The growth of a national market in plants and flowers thus generated pressure towards standardization; and it was in order to avoid frauds and confusion through the same plant being sold under different labels that a London Society of Gardeners put out its *Catalogues Plantarum* in 1730" (Thomas 84). Under the Linnaean method, every plant was given two names, one for genus and one for species. The rules Linnaeus outlined in *Critica Botanica* (1737) for naming plants scrupulously avoided any hint of the subjective, "permitting no names based on the plant's scent, taste, medical properties, moral character or religious significance" (Thomas 86). Such regimentation gave merchants greater control over their market by legitimating their scientifically named "products" and squeezing out unsanctioned farmers who sold their produce under folk names.

As science became the primary descriptive medium for nature, the language we used to reference nature gradually changed, altering the vocabulary we had at our disposal with which to conceptualize the non-human world as animate and sentient. Our language, reflecting the mechanistic epistemology, became emotionally and morally detached from

its subject. This move to adopt objective language served science by giving it greater control over nature. "In place of a natural world redolent with human analogy and symbolic meaning, and sensitive to man's behaviour," notes natural historian Keith Thomas, "[scientists] constructed a detached natural scene to be viewed and studied by the observer from the outside, as if by peering through a window, in the secure knowledge that the objects of contemplation inhabited a separate realm, offering no omens or signs, without human meaning or significance" (89).

According to M. Jimmie Killingsworth and Jacqueline Palmer, science propagates a culture which favors theoretical arguments, technical language, and jargon over referentiality, clarity and thoroughness (*Ecospeak* 103). The guiding principle in constructing scientific discourse is to deal with data or fact, not emotion or norms, in as objective a fashion as possible. The more value-free one's observations, the more credible. Within science there is a hierarchy of discourse, say Killingsworth and Palmer, where basic research--with its "closed, tightfisted arguments" and pure data collection--is valued most, and the narrative discourse used to teach science--with its careful packaging of information and stylistic conventions--is deemed "primitive, unsystematic, and underdeveloped" (*Ecospeak* 128). Less credible still in the eyes of those doing basic science is scientific activism, which allows itself to be "tainted" by political objectives and value judgements. Seeking to comply with the demands of objectivity, scientific

ecologists often feel prohibited, note Killingsworth and Palmer, from offering valuative assessments of human conduct.

"Objective" discourse is that which abides by the conventions prescribed by the scientific community. Advocates often point out that the truths that science discovers are not immutable facts (consider, for example, how often science has had to revise old facts in light of the new); instead, science's objective description of the world is just that, a description--one codified by a community of speakers and privileged over other methods of description. The scientist's exclusive faith in reason is nurtured by a community which denies the validity of any other avenue of understanding and which censures its members for dissent. "When science begins to influence the rhetoric and the instrumental realities of the public realm," observe Palmer and Killingsworth, "it loses its special character and becomes something other than science as defined by scientific authorities" (*Ecospeak* 126).

To the nature advocate, detached objectivity, far from being disinterested and apolitical, is patently self-serving and highly partisan. The objective truths arrived at through detached mathematical reasoning and experiment do not necessarily reflect an absolute reality as much as they reflect *consensus* about the interpretation of reality. Hard proofs, suggest many advocates, do not exist independently of those doing the interpreting. Scientists agree about the facts derived from their observations of the

physical world because they share the same conceptual guidelines. In other words, the truth arrived at through scientific rationalism is socially constructed within a well-defined discourse community. Reason, Nietzsche reminds us, is a *concept* created through consensus, not an infallible human faculty. Humanity constructs a universe of concepts, a shifting ephemeral world, says Nietzsche, like a spider web on moving water. Since we ourselves have created reason, finding truth in reason, notes the philosopher, is like hiding something under a bush only to return to it later and marvel at the "discovery" (Nietzsche 892).

As an important component of power, the discourse of objectivity is reproduced by various hegemonic social institutions. Universities, government agencies, and businesses refer to nature in utilitarian terms as a resource. As Killingsworth and Palmer point out in *Ecospeak*, science's view of nature as object and the capitalistic state's view of nature as resource share the common assumption that the universe is an inanimate mechanism. The language of science serves the interests of market capitalism in that it objectifies the living world, making it ready material for commodification. Government and developers frequently resort to the mechanistic model of the universe when justifying the exploitation of nature: "experimental science as it developed since the seventeenth century, with its fabled detachment from all natural objects (including human beings) . . . has been encapsulated and rigidified in government and industry in the form of

'scientific management'" (*Ecospeak* 12). Much in the way that science objectifies the natural world in order to control it conceptually, observe Killingsworth and Palmer, the capitalistic state objectifies nonhuman nature in order to produce wealth and power:

A typical analysis of the capitalist hegemony, or power base, indicates a harmonizing of science, government, and business made possible by a common tendency to use technology as a means of molding the world into productive systems, to produce knowledge in science, military strength and information ("intelligence") in government, and money in business. (*Ecospeak* 14)

This powerful "triumvirate" of state, business, and science "has not taken environmentalism very seriously," note the authors, in large part because of its low power, low status position in public discourse.

Proponents of the mechanistic perspective have both ideological and economic incentives for maintaining the supremacy of science. As Aldo Leopold points out, science, with its drive for physical control over nature, lends itself to capitalism and the cult of "progress":

Professors serve science and science serves progress. It serves progress so well that many of the more intricate instruments are stepped upon and broken in the rush to spread progress to all backward lands. One by one the parts are thus stricken from

the songs of songs. If the professor is able to classify each instrument before it is broken, he is well content.

Science contributes moral as well as material blessings to the world. Its great moral contribution is objectivity, or the scientific point of view. This means doubting everything except facts; it means hewing to the facts, let the chips fall where they may. One of the facts hewn by science is that every river needs more people, and all people need more inventions, and hence more science; the good life depends on the infinite extension of this chain of logic. That the good life on any river may likewise depend on the perception of its music, and the preservation of some music to perceive, is a form of doubt not yet entertained by science. (Leopold 162-63).

Under capitalism, applied science becomes industry designed to transform inanimate nature into product and profit. As nature is commodified, more and more of the "intricate instruments"--organisms and ecosystems--are "stepped on and broken." Yet, because of its avowed detachment, science is incapable of evaluating its own actions; the professor does not consider the implications of his or her science so long as it increases human knowledge and mastery. The detached observer, worries Leopold, values knowledge of a species over the actual existence of that organism.

As Leopold notes (like other advocates), modern science and capitalism have become engaged in an escalating process of expansion, where science facilitates commercial

production and capitalism promotes profitable science. The objectivism of science ends up serving capitalism quite nicely, since "hewing to the facts" excludes the nagging moral questions which arise from expropriation and destruction of other life forms. The voice or "music" of the river--which might engender an aesthetic, emotional, or moral perspective--is effectively silenced by science to make way for its transformation to product. Similarly, returning to the example of the vivisectionists, the vocal cords of the lab animal are severed to redefine it as a non-being, as animated matter. To acknowledge the music of the river or the cries of the animal would redefine nature from commodity or resource to being, and, as a result, would raise new ethical impediments to exploitative science. The advocate's project of acting to promote the interests of non-human life, explains Leopold, constitutes a "revolt against the tedium of the merely economic attitude toward the land" (Leopold 203).

8.2 Advocacy's Romantic Roots

The effort of advocates to contest the rule of science by extolling the virtues of intuition, experience, and emotion clearly identifies them as sympathetic to romanticism. After all, the rhetoric of advocacy is a discourse that developed within the nineteenth-century reaction against the Industrial Revolution. Most advocates will admit their indebtedness to romanticism. "The romantic view," says Edward Abbey, "while not the

whole of truth, is a necessary part of the whole truth" (*Desert Solitaire* 167). In American literature, authors like Thoreau, Bryant, Hawthorne, Cole, and Cooper wrote in the romantic vein, idealizing the rural life, lauding the wild and irregular in nature, and extolling the interpretive power of the human imagination. But unlike mainstream romanticism which embraced subjectivity, primitivism and sentimentality primarily out of humanistic impulses, the advocates' value those aspects of the romantic perspective that tend to move people away from humanism towards a more biocentric view of life. The goal of most advocates in challenging scientific rationalism is not its complete overthrow, but its incorporation into a qualitative approach to nature.

In *The Machine in the Garden*, Leo Marx traces the anti-scientific sentiments of American romantics like Thoreau and Hawthorne, to name a few, to a common reaction against science and industrialism. The romantic rebellion constituted a challenge to scientific rationalism's claim to absolute epistemological authority. Because of its professed stance of detachment, romantics felt that science was an extremely untrustworthy measure of anything touching upon values. In both England and America, the romantic movement represents a counter-mechanistic ideology which sought to undermine purely quantitative definitions of nature and humanity. From the romantic point of view, separateness is an illusion, all nature is one connected whole, and all beings owe their existence to another. Industrialism, which depended upon

compartmentalization and hierarchy, fostered society's alienation from nature and one another. Prompted by this sense of fragmentation, romantics attempted to revive the Golden Age ethics of harmony and simplicity, idealizing nature-based cultures and villainizing the profusion of machines and materialism.

Believing that intuitive insights gained through nature would remedy society's spiritual and physical ills, American nature writers like Thoreau and Emerson promoted a regimen of natural aesthetics combined with solitary contemplation. What is true of physical nature, they speculated, is true of human spiritual nature; thus, knowledge of the human condition could be attained through intimate contact with nature. As an antidote to the pervasive feeling of sterility and alienation generated by science's strict objectivity, romanticism touted sympathetic intuition as a reliable means of apprehending the nature of the universe. In stark contrast to the discord and displacement engendered by the Industrial Revolution, romantics advocated for humanity's harmonious integration into the natural world. Consequently, romanticism represents an organic cosmology, and, as such, shares with advocacy the goal of re-investing the non-human world with qualitative value, or, in the romantic terms, with spirit.

However, not all romantics are nature advocates. As discussed earlier, writers like Wordsworth and Emerson usually speak about nature as a metaphor for human existence. For many writers working in the mainstream romantic tradition, the natural world is

valued not so much for itself, but for its ability to serve as a conduit to some transcendent experience or as a catalyst for improving and elevating the human spirit. Advocacy differs from mainstream romanticism in that it is anti-humanistic; it is concerned with a real nature out there, and it recognizes the value of reason and scientific method. Many advocates, like Leopold and Carson, are scientists. Still, advocacy is essentially a romantic movement in that it values intuitive ways of knowing and it reads in nature meaning beyond the dead interaction of matter. Like the romantics, advocates distrust science that remains detached from its subject and they actively seek to overthrow the dominant mechanistic world view.

In *The Machine in the Garden*, Marx suggests that the sound of the train rumbling through the Walden woods signaled for Thoreau the displacement of the organic world by the industrial. His seclusion at Walden was in many ways a rejection of the mechanistic world of capitalism, with its machine-like labor, systematized trade, materialistic values, and, as Marx puts it, its "dehumanizing reversal of ends and means" (247). The material progress pursued so diligently by the mechanistic outlook may not coincide with moral development; in fact, speculates Thoreau, it probably hinders it. The train's introduction into the natural setting scene of Walden represents a harbinger of the age of the machine. The fact that humanity has harnessed the intellect to create such a powerful tool excites Thoreau, but his enthusiasm is diminished by the destruction wrought by industrialism as

a result of its misapplication. Technology in the service of cold, crass materialism does not elevate the human spirit, but demeans it. Describing the intrusion of the train at Walden, Thoreau sees it as a Trojan horse, offered to humanity by its creators as a gift, whose appealing surface belies the great destructive potential contained within:

That devilish Iron Horse, whose ear-rending neigh is heard throughout the town, has muddied the Boiling Spring with his foot, and he it is that has browsed off all the woods on Walden shore, that Trojan horse, with a thousand men in his belly, introduced by mercenary Greeks! Where is the country's champion, the Moore of Moore Hall, to meet him at the Deep Cut and thrust an avenging lance between the ribs of the bloated pest? (*Walden and Other Writings* 174)

Just as the gift of the horse was an act of betrayal, scientific rationalism stands to betray humanity's best hopes; inside its appealing exterior, technology, suggests Thoreau, is motivated by dubious designs--knowledge for the sake of knowledge, power for the sake of power. With its insistence on divorcing fact from value, scientific rationalism represents a Faustian bargain which Thoreau and other advocates reject vigorously. The way to avoid Faust's amoral materialism, suggests Thoreau, lies not in banishing the machine from the garden, but in re-conceiving its incorporation. Like others of his day, Thoreau is often moved to marvel at the creations of science. But Thoreau worries about how and why we apply our powers to the earth. As he mentions in *The Maine Woods*,

Walden, and elsewhere, humanity must reinvest the value-free perspective of the scientist with the value-laden view of the poet: "The earth is not a mere fragment of dead history, stratum upon stratum like the leaves of a book, to be studied by geologists and antiquaries chiefly, but living poetry like the leaves of a tree, which precede flowers and fruit,--not a fossil earth, but a living earth" (*Walden & Other Writings* 275).

Expressing similar sentiments, Nathaniel Hawthorne's short story "Ethan Brand" condemns the tendency of scientific rationalism to sacrifice the human heart for cold analysis.²⁸ In the story, a lime-burner, Bartram, meets the monomaniacal Ethan Brand by the glow of his furnace. Brand relates to Bartram and a collection of town derelicts his life-long search for the "Unpardonable Sin," and in the process reveals that he has discovered it, ironically, within his own heart: "The sin of an intellect that triumphed over the sense of brotherhood with man and reverence for God" (277). A cold, embittered, shell of a man, Brand applied abstract philosophy and calculating intellect to an essentially moral question. In his quest for knowledge, he had become a renowned scholar but had lost all the attributes of compassion and morality which make one human in the first place. When the others go to sleep, Ethan stares into the intense flames of the

²⁸While Hawthorne does not regularly employ a rhetoric of advocacy, the suspicion he expresses about science and industrialism reflects the romantic reaction against the mechanistic world view common to most advocates. Thus, a review of "Ethan Brand"

kiln and, realizing what he has become, is overcome with despair and throws himself into the flames.

In the morning, the lime-burner and his son discover in the ashes of the furnace a human skeleton, converted into brittle, white lime. Housed in the rib cage lay a hard chunk of lime in the form of a human heart. As Marx sees it, there is ample evidence in the text and in author's notes to suggest that Hawthorne associated the moral malignancy which afflicted Brand with both scientific rationalism and the industrialization it facilitated: "With the weakening of his moral nature he had become a 'cold observer, looking on mankind as the subject of his experiment' [Hawthorne's words]. In other words, Ethan is at once an agent and a victim of scientific empiricism or 'mechanism'" (Marx 272). The furnace which consumes Brand, with its associated images of fire, iron, steam, and smoke, represents the archetypal machine of industry. The death of the stone-hearted philosopher by machine suggests that the blind pursuit of knowledge and technology, bereft of any valuative assessment, will ultimately destroy our very humanity. Nature is the other obvious casualty of the human quest for power, and, like the logs that feed Brand's kiln, nature's very life force feeds the flames of the industrial furnace/machine. Appropriately, nature seems to rejoice at the demise of Brand and the

helps to illustrate the advocates' concerns that scientific rationalism had severed the mind from the human heart.

heartless view of the world he represented: "Dear Father," cried [the boy], skipping cheerily to and fro, "that strange man is gone, and the sky and the mountains all seem glad of it!" (Hawthorne 287).

Natty Bumppo, Cooper's fictional mouthpiece for nature in the Leatherstocking series, also expresses deep suspicion of the scientific world view. In *The Prairie*, the old trapper meets up with Dr. Obed Bat, an incompetent and arrogant naturalist engaged in cataloging the flora and fauna of the plains. Dr. Bat is a caricature of the scientific rationalist of the nineteenth century who, in Cooper's mind, worshipped science as his religion. (The diligent taxonomist was so entirely devoted to the mechanistic world view that he preferred to be hailed by the pseudo-latin title "Battius.") A strong humanist theme also runs throughout Bat's speeches, and he elevates man to the status of demigod. For Bat, man's reason is infinitely powerful and his creations rival God's in beauty and complexity. To the scientific rationalist, no mystery is beyond the comprehension of science, and thus mankind is invested with a kind of potential omnipotence and omniscience. For Natty, on the other hand, science was marginally adept at answering what and how, but could not answer why:

Your l'arning, though it is man's boast, is folly in the eyes of him, who sits in the clouds and looks down in sorrow at the pride and vanity of his creatur's. Many is the hour, that I've pass'd, lying in the shades of the woods, or stretched upon the hills of

these open fields, looking up into the blue skies, where I could fancy, the Great One had taken his stand, and was solemnizing on the waywardness of man and brute, below, as myself had often look'd at the ants tumbling over each other in their eagerness, though in a way and a fashion more suited to his mightiness and Power. Knowledge! it is a plaything--say, you who think it so easy to climb into the judgment seat above, can you tell me anything of the beginning and the end? (*The Prairie* 207)

Natty's ways of knowing are distinctly different from the Doctor's ways of knowing. While Dr. Bat pours over his books for an understanding of the physical world, Natty gains emotional and moral wisdom by "lying in the shades of the woods, or stretched upon the hills of these open fields, looking up into the blue skies." Unlike Bat who seeks conceptual and physical control of nature, Natty is guided by the desire to understand humanity's place within the whole of nature.

In Bat, says literary critic Donald Ringe, one can see "the attitude of some scientists who would elevate their studies above all others and assume that man has it within his power to understand and control all things" (Ringe 319). Nature advocates question the validity of objective knowledge and challenge the accuracy of the "evidence" afforded by detached observation. Obed Bat approaches nature as a physical storehouse of inanimate specimens and has no idea how all the parts work together as a whole. Appropriately, the naturalist spends much of his time lost in the prairie, criss-crossing the path of his friends

in directionless wanderings, so totally engrossed by his taxonomies and specimens that he is scarcely conscious of the drama of life going on about him. Furthermore, the Doctor's name, Bat, suggests that, like the nearly-blind bat, he has terrible insight and navigates his way around the world "in the dark." Bat's absolute faith in the power of reason surpasses his faith in the evidence of his own senses, but brings him no closer to a true perception of the world. In several instances Bat cannot even identify nature's most common of creatures. His own mule he mistakes for a "monster" with talons and horns; a charred buffalo he believes to be a horse; and--unable to recognize his own species--he mistakes the painted warrior Hard-Heart for a reptile. Bat relies too heavily on his "book larnin" and cannot appreciate the evidence of his own eyes. To Natty and for advocates in general, science is by itself an inadequate and unreliable means of understanding nature.

At one point in the narrative, Natty demonstrates the limited power of Bat's logic by pitting his intuitive and experiential knowledge against the Doctor's powers of deduction. Confronted with the mystery of Ishmael's closely guarded wagon (in which he holds Inez hostage), Natty, Paul, and the Doctor offer their suggestions for what may be inside. The scientist, testifying to the interpretive powers of reason, explains that "evidence" he has gained through deduction proves that the wagon hides a new species of ferocious animal. "You have seen the creatur?" asks an incredulous Paul Hover.

Not with the organs of sight; but with more infallible instruments of vision: the conclusions of reason, and the deductions of scientific premises. I have watched the habits of the animal, young man; and can fearlessly pronounce, by evidence that would be thrown away on ordinary observers, that it is of vast dimensions, inactive, possibly torpid, of voracious appetite! (*The Prairie* 115)

In the middle of this conversation, Natty, Paul Hover, and Dr. Bat are surprised by the unexpected appearance of the young officer, Middleton. Standing in the tall grass of the plains, the party hears something approaching, and Natty takes the opportunity to challenge the frightened scientist to demonstrate the power of science by identifying the source of the noise:

"Do you not hear something in the brake? it has been cracking the twigs these five minutes. Now tell me what the creatur' is?"

"I hope nothing ferocious!" exclaimed the Doctor. . . . It exceeds the limits of earthly knowledge! Buffon himself could not tell whether the animal was a quadruped, or of the *order* serpens! a sheep, or a tiger!"

"Then was your buffoon a fool to my Hector! Here; pup! What is it dog? shall we run it down, pup, or shall we let it pass?" (*The Prairie* 117)

The dog brought forward, it sniffs the air, stands attentively for a moment, then "peaceably resumed his recumbent attitude." Interpreting the signs offered by the animal

in light of his years of experience in the wild, Natty proclaims confidently "It is a man, if I am a judge of the creatur's ways. There is but little said atwixt the hound and me, but we seldom mistake each other's meaning!" (*The Prairie* 118). He is, of course, correct, and Middleton strides out of the grass to greet the trapper. The failure of detached objectivity and the triumph of intuition is a recurring theme throughout the novel, and it dramatizes the epistemological advantage the sensitive nature lover holds over the detached and dispassionate scientist.

This romantic mistrust of strict objectivity was a central tenet of advocacy through the nineteenth century and exists in the rhetoric of advocacy through the twentieth century to present. As Scott Slovic notes in his study *Seeking Awareness in American Nature Writing*, nature writers make a distinction between seeing with the eyes and perceiving with the whole self. In order to truly "see" or understand nature, one must become integrated with it. One must smell, touch, hear, see, and taste the natural world, and by making contact with it be absorbed and absorb it. For Edward Abbey, as with other nature writers, one cannot truly appreciate nature without having felt it. In his preface to *Desert Solitaire*, Abbey warns those who would merely look at the landscape that they will gain no wisdom from cursory glances:

Do not jump into your automobile next June and rush out to the canyon country hoping to see some of that which I have attempted to evoke in these pages. In the

first place you can't see anything from a car; you've got to get out of the goddamned contraption and walk, better yet crawl, on hand and knees, over the sandstone and through the thornbush and cactus. When traces of blood begin to mark your trail you'll see something, maybe. Probably not. In the second place most of what I write about is going fast. . . This is not a travel guide but an elegy. (xiv)

Objectivists' assurances that nature is best apprehended at arm's length has been so thoroughly propagated within the public that the average tourist will believe that he or she can "see" a natural wonder from the window of a speeding car. To advocates like Abbey, the entire industrial artifice and "contraptions" like automobiles designed to promote our comfort have worked only to dull our perceptive faculties and distance humanity from nature.

Abbey offers a different way of seeing, where the observer perceives nature from the perspective of one looking at the world from within, as one fully integrated with that which is observed. In Abbey's description of the requirements of this heightened insight, the ideal observer symbolically and physically merges with the desert. As "traces of blood" seep into the trail, the boundaries between observer and observed dissolve and one is compelled to recognize that there can be no separation of the self from knowledge, no "unbiased" perspective, as all knowledge is the result of active participation with the observed. One is always a participant in nature and in knowing nature. Only by

overcoming our aloof isolation, argues Abbey, can we revive our intuitive faculties, atrophied from too little use in this increasingly positivistic society.

Speaking for nature works to undermine the stability of the dominant mechanistic paradigm in that it opposes objectivity with subjectivity, referentiality with metaphor, determinacy with indeterminacy. The image of nature as "speaking" implies a poetic rather than a strictly rational perspective of reality, since there is no rational foundation for representing nature as a speaking subject. Attributing language to nature challenges the hegemony of mechanistic discourse in that it suggests both an alternative interpretive method and an wholly different mode of representation.

First, by relying on emotion, sympathy, and experience to interpret nature, the advocate promotes human perceptive faculties long denigrated and suppressed by scientific rationalism. Where reason dictates that the expressions of non-human nature are merely the phenomenon of inanimate matter, intuition allows the observer to apprehend sorrow in the cry of a lone goose and a declaration of community in the howl of the wolf. Such a description of reality is constructed from an alternative set of evidence. The advocate's depictions of geese as mourning, trees as lamenting, or the earth as pleading are not supported by empirical methods or logic, but derive their legitimacy from time-tested experience and sympathy.

Second, by framing those interpretations in the form of tropes, the advocate underscores the impossibility of immediate correspondence of words and things. Where scientific discourse strives to create a denotative language in which there is a circumscribed and unambiguous connection between referent and reference, the rhetoric of advocacy exploits the indeterminacy of language. In *Novum Organum*, Bacon decries discourse shaped by the "apprehension of the vulgar," where imprecise words "plainly force and over-rule the understanding, and throw all into confusion, and lead men away into numberless empty controversies and idle fancies" (Bacon). The "fanciful" image of nature speaking draws on the connotative force of language to evince a more immediate emotional apprehension of nature. Recognizing that external nature must always be perceived through unavoidably subjective means, advocates find metaphor a truer representation of the imagination's synthesis of understanding. The advocate's reliance on tropes suggests that apprehending nature, like apprehending metaphors, depends on one's active creation of understanding.

Because this poetic discourse threatens the hegemony of the mechanistic world view, it is aggressively opposed by the dominant paradigm, and in extreme circumstances it is associated with insanity. It is not uncommon to hear those in business or government castigate environmentalists as "environmental whackos" (a la George Bush in the 1992 election campaign), "tree huggers," or "wild-eyed preservationists." Such depictions of

the nature advocate as insane largely derive from the fact that they argue outside of the parameters of sanctioned rational discourse. Implicit in such criticism is the assumption that the nature representative's connection to the wilderness has somehow corrupted their human (i.e. rational) thinking process and is reflected within their language. The wilderness, notes nature historian Roderick Nash, has long been associated with irrationality. According to Nash, the etymology of bewilder comes from attaching the verb "to be" to "wildern." It is used throughout English literature to describe a state where one is confused and disoriented (2). Wilderness, in addition to being perceived as non-human habitat, is associated with a non-human state of mind. "Wild country," says Nash, "was also a setting where knowledge came as much from intuition as from reason or science" (259). For environmentalists, this view of nature "was a prerequisite for empathy and sympathy with the nonhuman world," but to proponents of the dominant mechanistic model it was seized upon as a clear sign of the illegitimacy of the rhetoric of advocacy.

Using an analogy from psychoanalysis, Palmer and Killingsworth describe the environmental crisis created by the mechanistic world view as the consequence of a culture of repression. In response to the environmental crisis, the dominant technological establishment acts like the human ego and suppresses the environmentalists' claims that would threaten its control. Our technological culture refuses to acknowledge the voice of

the environmental movement, suggest the authors, because to do so would force it to confront and redress the underlying ecological crises identified by the advocates. In this model, the conflict between the oppressive rationalist paradigm and the marginalized environmentalists results in a case of social "hysteria," where humanity represents the controlling mind and nature the afflicted body. In the case of hysteria, the repressed aspects of the ego ultimately find expression in the body in the form of some neurosis or tick. Similarly, industrial society tries to repress ecological trauma, but the physical signs of destruction in nature and the "hysterical" voice of the environmentalists push through into our social consciousness. Killingsworth and Palmer describe the voice of environmentalists metaphorically as a "cry of pain" expressed by the ailing body/nature: "Repeated again and again in successive environmental catastrophes and in the environmentalist outcry that accompanies them, the cry of pain signals the return of the represses, the earthly unconscious" ("The Discourse of 'Environmental Hysteria'" 14).

The strident rhetoric employed by some nature representatives has inspired many anti-environmentalists to label them as "hysterical" or irrational. In a culture that privileges objectivity and reason, this charge is the equivalent of saying that their fears are "all in their heads." But as Killingsworth and Palmer see it, the complaints of the environmentalists are inspired by real crises and represent "the coming into consciousness of that which, having been avoided for far too long, has created an illness within the

mind-body system of earthly existence" ("The Discourse of 'Environmental Hysteria'" 3). The apocalyptic discourse they use is, like discourse of neurotics, a strategy of last resorts, arising out of their relative powerlessness. However, as with the exaggerated rhetoric of hysterics, the hyperbole of environmentalists is justified since it symbolizes a very real dysfunction within the social mind. One can see this drama played out in the way that defenders of the status quo insist that indisputable scientific evidence does not exist for problems like global warming or ozone depletion despite the fact that applying inferential reasoning to the data available suggests catastrophe is on the way. Their concerns effectively silenced by objectivism, environmentalists counter with the "subjective"--emotions and ethics.

While scientific rationalism still constitutes the dominant paradigm, a number of the most influential contemporary thinkers have called attention to the ways in which our notions of "rational thought" are historically and politically constructed to the advantage of those in power. Throughout his works, the French historian and critic Michel Foucault examines the notion of truth as an expression of power. In *Madness and Civilization* and *The Archaeology of Knowledge*, Foucault contends that madness should not be viewed strictly as a psychological phenomenon, but should be understood against the definitions of reason put forth by powerful social institutions. The authorities in government, medicine, and religion who define reason publish a threshold of tolerance for behaviors

which are complicit with their established rule. Actions or discourse which deviate from the dictated norm are excluded or re-integrated through coercion. The discursive relations between hegemonic institutions determine what will be recognized as sanity and insanity as well as establish the rules of discourse which allow such objects of introspection to appear in the first place.

Following Nietzsche, Foucault asserts that truth is a social construction and, what's more, that its creation is largely dictated by the dominant "scientific discourse":

In societies like ours, the "political economy" of truth is characterized by five important traits. "Truth" is centered on the form of scientific discourse and the institutions which produce it; it is subject to constant economic and political incitement (the demand for truth, as much for economic production as for political power); it is the object, under diverse forms, of immense diffusion and consumption (circulating through apparatuses of education and information whose extent is relatively broad in the social body, notwithstanding certain strict limitations); it is produced and transmitted under the control, dominant if not exclusive, of a few political and economic apparatuses (university, army, writing, media); lastly, it is the issue of a whole political debates and social confrontation ("ideological" struggles).

(Power/Knowledge 132)

For Foucault, truth and power are intimately connected, as those who are in power shape truth and that truth in turn is exercised to wield power. Since the Enlightenment, "scientific discourse" has shaped the whole set of relations between thought, language, values, and institutions that together constitute Western culture's method for organizing knowledge.

The object of our scientific institutions is not to really to "discover" truth, says Foucault, which is an impossible task to complete with any certainty; instead, the quest for knowledge is "a battle about the status of truth and the economic and political role it plays" (*Power/Knowledge* 132). From this perspective, the scientific discourse that has controlled the construction of knowledge for centuries has maintained its influence because it is economically expedient. The notion of nature as inanimate object serves the political and economic interests of the prevailing capitalistic establishment since it legitimizes the exploitation and commodification of non-human nature. The rules of evidence established by science recognize only humanity as willful, conscious, and ethical beings, making the subjection of nature both logical and ethical.

While Foucault focuses his analysis of exploitation on the human body, his observations of the mechanistic world view are equally revealing when applied to the "body" of nature. Descartes identified the body as a manipulable object, says Foucault, when he formulated his "anatomico-metaphysical" perspective of nature. This scientific

perspective overlaps with a "technico-political" view which aimed at "controlling or correcting the operations of the body." Similarly, nature is made machine through scientific discourse, and as such is construed as a "docile" body "that may be subjected, used, transformed, and improved" ("Docile Bodies" 180). Defining the human body, or the body of nature for that matter, in mechanical terms makes it an object of control to be employed for the production of wealth and power. Just as the mechanization of the human body results in coercion, scientific rationalism objectifies nature, assuring "the constant subjection of its forces and impos[ing] on them a relation of docility-utility" ("Docile Bodies" 181). In short, the mechanistic view of nature has prevailed despite evidence of its failure--i.e. anthropogenic environmental catastrophes--because it perpetuates and legitimizes the power of the dominant capitalistic paradigm.

Within the dominant social institutions, the organic view of nature as conscious and sentient is aggressively suppressed. Aldo Leopold, himself a scientist, describes the pressures in the world of academia to conform to subscribe to an objective view of truth:

There are men charged with the duty of examining the construction of the plants, animals, and soils which are the instruments of the great orchestra. These men are called professors. Each selects one instrument and spends his life taking it apart and describing its strings and sounding boards. This process of dismemberment is called research. The place for dismemberment is called a university.

A professor may pluck the strings of his own instrument, but never that of another, and if he listens for music he must never admit it to his fellows or to his students. For all are restrained by an ironbound taboo which decrees that the construction of instruments is the domain of science, while the detection of harmony is the domain of poets. (Leopold 162)

To recognize that nature possesses qualitative value--that it exhibits community or purpose is "taboo" to the scientist's code of objectivity. Bound by the rules of scientific rationalism, scholars may be compelled to ignore or repress the "music" or voice of nature or face being sanctioned by their own peers as being at least irrational and perhaps even mad.

The advocate argues just the opposite--that to base human conduct towards nature purely on reasoned principles is in itself a form of madness. In *Desert Solitaire*, Abbey describes a meeting with an engineer whose vision of the desert is strictly rational and utilitarian. Describing the government's intention to build millions of dollars of roads in the desert, the engineer justifies the plan to Abbey by explaining that it will bring "twenty, thirty times as many tourists in here as you get now." Abbey guesses at the destruction such development will cause and surmises that such a view is the height of insanity:

He was a pleasant-mannered, soft-spoken civil engineer with an unquestioning dedication to his work. A very dangerous man. . . . I knew that I was dealing with a madman. (*Desert Solitaire* 44)

Turning the dominant epistemology on its head, the advocate contends that, on its own, strict objectivity is a form of insanity which results in a wide range of self-destructive and amoral behavior. After all, some of the most reprehensible violations of nature such as vivisection, the wholesale extermination of "pest" species, and the deforestation of much of the world's rain forests can be attributed to a detached and dispassionate view of non-human nature. The measure of sanity here is not an evaluation of how well one is able to explain, predict, and control the workings of the physical world, but in one's ability to place oneself within that world community as an ethical participant. To this extent, scientific rationalism fails miserably at providing humanity with moral guidance as members of a sentient, living, and thus moral world.

8.3 The Rhetoric of Advocacy: A Transactional Epistemology

The problem with contemporary science is that it pursues its quantitative measurements to the exclusion of all other means of perception. The advocates espouse the virtues of a more holistic approach, demonstrating through their own experiences that nature could only be properly understood through a combination of observation and

intuition. Thoreau, for example, was a great cataloger of species, but compiled his lists and measurements in an effort to better understand the complex interactions between all organisms in a community. In addition to seeking "facts," Thoreau believed in immersing one's senses and emotions in nature in an effort to understand its "spirit" as well as we understand its biology. For the advocate, interpreting nature involves qualitative measurements which acknowledge and embrace the inevitable subjectivity inherent in the act of observation. Rejecting the myth of objectivity--that we can step away from our own opinion to render strictly quantifiable pronouncements--, advocates recognize that truth is largely a personal and social creation. Rejecting simple subjectivism, the advocate contends that there is a real world external to our human existence, and that we can make reliable pronouncements about the workings of the physical universe. In their efforts to understand nature, these nature writers integrate rigorous measurements of physical phenomena with moral, aesthetic, and emotional assessments of personal experience.

In many ways, the rhetoric of advocacy springs from an epistemological view closely aligned to transactional rhetoric. In his overview of the theories of rhetoric, *Rhetoric and Reality*, James Berlin defines the transactional approach as "an epistemology that sees truth as arising out of the interaction of the elements of the rhetorical situation: an interaction of subject and object or of subject and audience or even of all the elements--

subject, object, audience, and language--operating simultaneously" (Berlin 15). Transactional theories generally fall into three categories of emphasis: classical, cognitive, and epistemological. Theorists like Louise Rosenblatt, Ann Berthoff and Richard Ohmann who posit what Berlin calls an epistemic transactional rhetoric--the view I will be dealing with here--contend that language enters into all aspects of the relationship between speaker audience and material: "All experiences, even the scientific and logical, are grounded in language, and language determines their content and structure. And just as language structures our response to social and political issues, language structures our response to the material world" (Berlin 16). For proponents of an epistemic rhetoric, truth is created through discourse, a position that implies that "knowledge is not discovered by reason alone, that cognitive and affective processes are not separate, that intersubjectivity is a condition of all knowledge, and that the contact of minds affects knowledge" (Berlin 165).

In her book, *The Reader, the Text, and the Poem*, Louise Rosenblatt outlines a transactional theory of reading that articulates many of the epistemological assumptions that advocates bring to interpreting or "reading" the text of nature. Following ideas pioneered by John Dewey, Arthur Bentley, and William James, Rosenblatt describes how knowing is, necessarily, a "transaction between a particular individual and a particular

environment."²⁹ Using an ecological metaphor, Rosenblatt characterizes reading as an "event" in which the individual responds to stimulus from the external "environment":

The current interest in ecology also illuminates the value of the transactional formulation. To see man as separate from his environment, being affected by it, or affecting it, does not do justice to the ecological process, in which man and his environment are part of a total situation, to use Dewey's earlier term, each conditioned by and conditioning the other.

In ecological terms, the text becomes the element of the environment to which the individual responds. Or, more accurately, each forms an environment for the other during the reading event. Sharp demarcation between objective and subjective becomes irrelevant, since they are, rather, aspects of the same transaction--the reader looks to the text, and the text is activated by the reader. A "subjective" response assumes an "object" at the other transactional pole; it is better to avoid the use of either in characterizing the reading and criticism of the literary work. (18)

As Rosenblatt notes, ecology shares with transactionalism the notion that the knower and the known mutually condition one another. For the transactionalist, a text is "meaningful" only by virtue of its relationship to the reader who interprets it. For the

²⁹Rosenblatt includes under the transactionalist umbrella "movements like pragmatism, phenomenology, existentialism, and psychoanalysis that seek in one way or

advocate, the environment is made meaningful when the observer applies language to experience.

Taken literally, Rosenblatt's metaphor expresses the advocates' philosophy regarding humanity's relationship to the environment, as well as their views on language. Like transactionalists, most nature advocates contend that our knowledge of the natural world involves the interaction of the observer and the observed within a social context. Nature really exists out there for our examination, but our experience of the external world is always filtered through personal sensations and beliefs; and those beliefs influence and are influenced by cultural assumptions. For the transactionalist, "interest, expectations, anxieties, and other factors based on past experiences affect what an individual perceives. . . . In short, what is perceived involves both the perceiver's contribution and the stimulus" (Rosenblatt 19).

Like proponents of transactionalism, the advocate recognizes that language plays a crucial role in mediating between the object, observer, and audience, facilitating personal understanding of nature and constructing social concepts of nature. Consequently, the nature advocates frequently emphasize the role of language in fostering either a sense of identification or alienation in our relationship to nature. The goal of many of these

another to incorporate the human consciousness within a theory of knowledge." (16)

writers is to subvert the language of strict objectivism or subjectivism with a discourse which challenges the validity or the usefulness of the dichotomy between the two.

Of the nature writers examined here, Aldo Leopold, trained as a scientist, worked most diligently to redefine truth as arising out of the interaction of object, subject and language. Most advocates appreciate the contribution that science makes to our knowledge of the physical world, but they insist that qualitative interpretation is an inevitable component of understanding. For instance, in seeking to explain why a lone goose will honk incessantly after a missing mate, Leopold tries to "keep an open mind" and admit the evidence of his personal experience and intuition. When accompanied by affective insights, the power of science is augmented, and we begin to understand the nature of grief that one goose feels for another:

In thus watching the daily routine of a spring goose convention, one notices the prevalence of singles--lone geese that do much flying about and much talking. One is apt to impute a disconsolate tone to their honkings, and to jump to the conclusion that they are broken-hearted widowers, or mothers hunting lost children. The seasoned ornithologist knows, however, that such subjective interpretation of bird behavior is risky. I long tried to keep an open mind on the question.

After my students and I counted for half a dozen years the number of geese comprising a flock, some unexpected light was cast on the meaning of lone geese. It

was found by mathematical analysis that flocks of six or multiples of six were far more frequent than chance alone would dictate. In other words, goose flocks are families, or aggregations of families, and lone geese in spring are probably just what our fond imaginings had first suggested. They are bereaved survivors of the winter's shooting, searching in vain for their kin. Now I am free to grieve with and for the lone honkers.

It is not often that cold-potato mathematics thus confirms the sentimental promptings of the bird-lover. (Leopold 22)

Combining statistical analysis with his intuited sense of birds' grief, Leopold rejects the false alternative of having to choose between "cold-potato" empiricism and groundless sentimentalism. Leopold and other advocates would argue that such an epistemological dichotomy does not exist, that knowledge is intersubjective. Contrary to what positivists would argue, science does not proceed from dispassionate calculations, but from hunches, hopes, gut feelings, or, in the case of some naturalists, "sentimental promptings."

Furthermore, Leopold suggests that science does not *necessarily* have to "murder to dissect;" romantic intuition and science can be reconciled. In the service of advocates like Thoreau, Marsh, Carson, Leopold, and Commoner, science becomes a powerful tool for confirming qualitative speculations about the needs or desires of non-human life. If

one begins, as Leopold does here, from the assumption that nature constitutes sentient, self-motivated life, science serves quite well to verify an organic world view.

For Leopold, the dominance of the mechanistic model within universities has further compartmentalized and objectified nature. "Education, I fear, is learning to see one thing by going blind to another" (Leopold 168). Perspectives which emphasized a holistic method and which employed both descriptive and valuative approaches to nature have been systematically marginalized within the curriculum as "soft science." With the rise of scientific rationalism, the organic approach to nature was put in competition with experimental methods which dealt with nature by breaking it down and examining it as isolated components. "It was quite natural that laboratory biology soon came to be regarded as the superior form of science," notes Leopold. "As it grew it crowded natural history out of the educational picture" (207).

Despite objectivism's position of privilege in education, Leopold admires amateur naturalists who are attracted to science by a *love* of nature. In *A Sand County Almanac*, he recounts the efforts of an Ohio housewife who maintained detailed observations of the interactions of the song sparrows in her back yard for years, purely out of the desire to know the "workings of the sparrow community . . . and sparrow psychology." Yet formal education pretends to extirpate personal passion from science and discourages this wide-angle perspective:

What is our educational system doing to encourage personal amateur scholarship in the natural-history field? We can perhaps seek and answer to this question by dropping in on a typical class in a typical zoology department. We find the students memorizing the names of the bumps on the bones of a cat. It is important, of course, to study bones; otherwise we should never comprehend the evolutionary process by which animals came into existence. But why memorize the bumps? We are told that this is part of biological discipline. I ask, though, whether a comprehension of the living animal and how it holds its place in the sun is not an equally important part. Unfortunately, the living animal is virtually omitted from the present system of zoological education. (Leopold 205-6)

Knowing the mechanical details of "bumps on bones" helps us understand the workings of isolated parts of nature, but passion and imagination, say the nature advocates, enable us to comprehend "the living animal" as a valued member of a complex and beautiful living system.

Within the sciences, some have disregarded the taboos against qualitative assessments of nature, and have spoken for nature as opposed to speaking about it. In *Ecospeak*, Killingsworth and Palmer conclude that scientifically trained nature writers like Rachel Carson, Aldo Leopold, and Barry Commoner "have brought the message of ecological holism to the public and have asserted the radical connection between science

and social history in the face of strong resistance from the scientific community itself" (*Ecospeak* 52-3). The authors observe that this scientific activism allows the scientist to cross the boundary between the "scientific *is* to the ethical *ought*." Nature advocates working within the sciences present information about the natural world which has been gathered using scientific method, but they bring to this descriptive task their own valuative insights. Advocacy is accomplished within the sciences by assessing the moral implications of technological and scientific observations. Thus, for example, it is not enough to simply report PH levels of rain to the public; the advocate will interpret the data qualitatively in light of non-human and human interests and--stepping out of the role of "disinterested" observer--will assert that such levels are unacceptable and the social conditions which produce the pollution are deeply flawed and unethical.

The fact that these nature writers write and speak for nature with such conviction underscores their faith in the power of rhetoric to shape our way of thinking about and, ultimately, our actions. The advocate realizes we do not arrive at an absolute understanding of nature through empirical means, but that notions of nature and, perhaps more importantly, our conduct towards nature are socially arbitrated through language. From Thoreau to Dillard, nature advocates in America have emphasized the influence and the importance of the role of language in the process of creating knowledge. *How* a person approaches nature, which entails assumptions shaped by social discourse,

necessarily influences their perspective, and the language they use to describe that experience in turn shapes society's view of the natural world. "It is the human subject, the self, that provides the medium through which the objects of nature and the objects of the laboratory might be reconciled and mutually interpreted," note the authors of *Ecospeak*: "The mind shapes the world and is shaped by the world. One of Leopold's deepest realizations is that scientific intelligence . . . simultaneously constructs nature and is itself re-formed by nature" (63). The advocates speak for nature because they recognize that the "truth" about nature's value as a moral entity must be constructed in public discourse, that our understanding of the physical world--even our *way* of understanding--will be altered as a result of discourse.

The very idea of "nature" as an entity which can be destroyed, preserved, revered, or represented is made possible through language. If language were not brought to bear on experience, impressions of the natural world would exist only in the immediate moment. Language makes it possible for the observer to reflect upon experience, synthesizing meaning from a palate of impressions, associations, and concepts. The role of the observer as synthesizer or interpreter creates an unavoidable paradox in humanity's relationship to the natural world. We can know of things outside ourselves, but that knowledge is always mediated through the language-using observer. For instance, the nature experience, common to all the writers examined here, is often described as an

event prior to or outside of language, yet it is only made conscious and meaningful when articulated in language. As Dillard describes it, language pulls the observer away from raw sensations and the perpetual present to a more distant space of contemplation, but this self-consciousness, constituted in language, is necessary for making sense of the world:

Consciousness itself does not hinder living in the present. In fact, it is only to a heightened awareness that the great door to the present opens at all. Even a certain amount of interior verbalization is helpful to enforce the memory of whatever is taking place. The gas station beagle puppy, after all, may have experienced those same moments more purely than I did, but he brought fewer instruments to bear on the same material, he had no data for comparison, and he profited only in the grossest of ways, by having an assortment of itches scratched. (*Pilgrim at Tinker Creek* 81)

Without language, there can be no reflection and hence no recognition of the *quality* of an experience. Language is the only human faculty that makes it possible to derive meaning from the mosaic of moments which constitute experience. That constructed understanding, then, is in turn brought to bear on experience, ever shaping and coloring subsequent observations.

The advocate expresses an ardent belief in the existence of an external world, yet admits that belief must be based on faith, since the mediated nature of understanding

means that our apprehension is always somewhat imperfect, always a step removed from that which is observed. Thoreau and Muir describe this uncertainty as "mystery," Abbey describes it as "paradox," and Dillard calls it "indeterminacy." Regardless of what they call it, all these writers are referring to the same phenomenon: the impossibility of stepping outside of our humanity to know nature unmediated. Dillard articulates this sentiment most eloquently in her book *Pilgrim at Tinker Creek*. To her, the natural world eludes perfect understanding, and if we are to adjust our behavior to account for this, we must abandon the belief in absolute, concrete, uncontroversial truths:

Many of us are still living in the universe of Newtonian physics, and fondly imagine that real, hard scientists have no use for these misty rambling, dealing as scientists do with the measurable and known. We think that at least the physical causes of physical events are perfectly knowable, and that, as a result of various experiments keep coming in, we gradually roll back the cloud of unknowing. We remove the veils one by one, painstakingly, adding knowledge to knowledge and whisking away veil after veil, until at least we reveal the nub of things, the sparkling equation from whom all blessings flow. Even wildman Emerson accepted the truly pathetic fallacy of the old science when he wrote grudgingly towards the end of his life, "When the microscope is improved, we shall have the cells analyzed, and all will be electricity, or somewhat else." All we need to do is perfect our instruments and our methods,

and we can collect enough data like birds on a string to predict physical events from physical causes. (*Pilgrim at Tinker Creek* 202)

But this confidence in our abilities to "reveal the nub of things" is misplaced, says Dillard, since we can only apprehend nature in terms of probabilities; we cannot predict its actions with certainty. Discoveries in modern physics, the science which has delved most deeply into the mysteries of the universe, are now confirming what nature advocates have been saying for over a century: that perfect and total knowledge is impossible. Dillard uses the relativistic theories of physicist Werner Heisenberg to dramatize the point:

[In] 1927 Werner Heisenberg pulled out the rug, and our whole understanding of the universe toppled and collapsed. For some reason it has not yet trickled down to the man on the street that some physicists now are a bunch of wild-eyed, raving mystics. For they have perfected their instruments and methods just enough to whisk away the crucial veil, and what stands revealed is the Cheshire cat's grin.

The Principle of Indeterminacy, which saw the light in the summer of 1927, says in effect that you cannot know both a particle's velocity and position. You can guess statistically what any batch of electrons might do, but you cannot predict the career of any one particle. They seem to be as free as dragonflies. You can perfect your instruments and your methods till the cows come home, and you will never ever be

able to measure this one basic thing. It cannot be done. The electron is a muskrat; it cannot be perfectly stalked. And nature is a fan dancer born with a fan; you can wrestle her down, throw her on the stage and grapple with her for the fan with all your might, but it will never quit her grip. She comes that way; the fan is attached.

It is not that we lack sufficient information to know both a particle's velocity and its position; that would have been a perfectly ordinary situation well within the understanding of classical physics. Rather, we know now for sure that there is no knowing. You can determine the position, and your figure for the velocity blurs into vagueness; or, you can determine the velocity, but whoops, there goes the position.

(Pilgrim at Tinker Creek 203-203)

The nature of the role of observer seems to be at the root of this impossibility of knowing things as they really are. As we perceive the world, we necessarily re-shape it, distilling sensations and experience into a new meaning which is neither the object itself nor purely the mind of the observer. "The use of instruments and the very fact of an observer seems to bolix the observations"; notes Dillard, "as a consequence, physicists are saying that they cannot study nature per se, but only their own investigation of nature. And I can only see bluegills within my own blue shadow, from which they immediately flee" *(Pilgrim at Tinker Creek 202-203)*. Much in the way that Dillard's shadow creates a space in which the fish comes into physical focus, so, too, language creates the

conceptual space in which the fish takes mental shape. And like the fish that darts away from the looming figure, nature out there escapes definition through language, remaining always a step removed from the representation. In the world of indeterminacy, knowledge must ultimately rest in belief, opinion, speculation,--in short, in faith, that component of knowing which objective science postures against so vigorously. "All this means," surmises Dillard, "is that the physical world as we understand it now is more like the touch-and-go creek world I see than it is like the abiding world of which the mountains seem to speak. The physicists' particle whiz and shift like rotifers in and out of my microscope's field, and that this valley's ring of granite mountains is an airy haze of those same particles I must believe" (*Pilgrim at Tinker Creek* 204).

As Dillard describes it, "truth" is belief in the face of indeterminacy. Rather than resist uncertainty, she and other nature writers suggest that we embrace it, allowing the revisability of knowledge to be a guiding principle of human conduct. Considering the impossibility of perfect knowledge, we must try to live with uncertainty as best we can, ever testing, ever seeking to improve the efficacy of our knowledge. In some ways, the nature advocate is a pragmatist, concerned not so much with what is absolutely true (which they admit is impossible to determine), but with what works. In each case of advocacy discussed in this study, the writer is motivated by the devastating consequences of failing mechanistic theories to offer an alternative view of humanity's relationship to

nature that will yield positive results for nature. Consider, for example, Leopold's land ethic. As Bryan Norton points out in his essay in *Environmental Pragmatism*, Leopold's land ethic developed in response to "a recognition that scientific knowledge is inadequate to guide gross manipulation of the ecosystems" (85). Consequently, he outlined an ecological ethic which emphasized humanity's moral obligation to nature, a view he believed would be more successful in protecting nature and serving long term human interests. "Theory, according to the pragmatist," observes Norton, "must ultimately be tested against experience" (94). As Norton sees it, Leopold employs a rhetoric which is "deeply pragmatic in spirit," relying heavily on his experience as a forester and game manager to prove the merits of ecological thinking.

One of the major problems with the mechanistic world view and scientific rationalism which informs it is that it hasn't offered us guidance towards living in nature. Rather, it has provided us with methods for dominating the natural world, with the unfortunate consequence that we have pushed many species into extinction, diminished the carrying capacity of many habitats, and threatened the health and well-being of humanity. Commenting on the flaws of scientific education, Leopold contends that the detached and narrowly prescribed knowledge imparted in schools does not improve our ability to understand nature and may even threaten human survival by neglecting to inform us how to conduct ourselves in nature, to be good "citizens":

To visualize more clearly the lopsidedness and sterility of biological education as a means of building citizens, let's go afield with some bright student and ask him some questions. We can safely assume he knows how plants grow and cats are put together, but let us test his comprehension of how the land is put together.

We are driving down a country road in northern Missouri. Here is a farmstead. Look at the tree in the yard and the soil in the field and tell us whether the original settler carved his farm out of the prairie or woods. Did he eat prairie chicken or wild turkey for his Thanksgiving? What plants grew here originally which do not grow here now? . . .

Many students would consider these questions insane, but they are not. Any amateur naturalist with a seeing eye should be able to speculate intelligently on all of them, and have a lot of fun doing it. You will see, too, that [ecology] deals only incidently with the identity of plants and animals. . . It deals principally with their relations to each other, their relations to the soil and water in which they grew, and their relations to human beings. . . . If education does not teach us these things, then what is education for? (Leopold 208-210)

For Leopold and other advocates, knowledge must be useful; if not, then our theories need to be revised until experience proves them to be an effective tool for managing conduct. All the nature writers examined in this study agree that the dominant theories

which see nature as inanimate object have had devastating effects, giving rise to the need to replace humanism with biocentrism and, similarly, to replace a host of disparate, isolated scientific disciplines with an organic ecology.

What these nature advocates have worked for is nothing less than an epistemological revolution. And, true to their convictions that language is the mediating force in shaping understanding, these writers use rhetoric to bring about a productive change in attitudes and actions. The act of speaking for nature accomplishes this task by moving nature from the realm of object to being, re-defining it as a valuable community of life. As Merchant demonstrates in her description of organic cultures, the belief that nature is an ethical, sentient being prevents unchecked exploitation, and for that reason a variety of advocates have suggested that this view may be a better theory of nature. Perceiving nature as a community which includes humanity is a much more useful notion of the natural world because it promotes the sort of restraint and reverence necessary to accomplish a shift to sustainable human cultures.

Although language does not construct the physical world, it has the power to influence the actions which shape our environment. Even Edward Abbey, who bristles at the notion of imposing human constructs on nature, recognizes the power of rhetoric to transform the world. When hiking in the canyons of The Maze near Green River, Abbey becomes concerned that the fragile wilderness area will fall victim to developers. He

contemplates naming the magnificent monoliths as a way of claiming them for himself and like-minded preservationists or as a means of defining them outside of the utilitarian world. His hiking partner, Bob Waterman, balks at the idea, suggesting that naming constitutes an act of appropriation. But Abbey persists, recognizing that language can exercise a remedial force in society, countering dominance with love: "[If] we don't name them," he warns his reluctant friend Waterman, "somebody else surely will" (*Desert Solitaire* 288).

The power of rhetoric entails great obligations. For Abbey, the act of naming can either correspond to the world, improving our understanding of nature, or it can become detached from real things and experience, distorting our understanding:

Through naming comes knowing; we grasp an object, mentally, by giving it a name--hension, prehension, apprehension. And thus through language create a whole world, corresponding to the other world out there. Or we trusts that it corresponds. Or perhaps, like a German poet, we cease to care, becoming more concerned with the naming than with the things named; the former becomes more real than the latter. And so in the end the world is lost again. No, the world remains--those unique, particular, incorrigibly individual junipers and sandstone monoliths--and it is we who are lost. Again. Round and round, through the endless labrynth of thought--the maze. (*Desert Solitaire* 288-89)

The danger in language, suggest Abbey, is when our discourse obfuscates its referent or alienates the listener from the subject, much in the way that the language of "resource" and "raw materials" has misled many to perceive the natural world as a collection of dead matter. When language does not improve our ability to comprehend our world, we become "lost," says Abbey, in a "labyrinth of thought." As our increasing environmental crises suggest, the consequences of distorted conceptions and unfounded beliefs about nature can be catastrophic. Rather than leave the naming up to those who seek exploit the natural world, the advocates employ their rhetorical skills to foster a positive and vital relationship between nature and humanity. .Ultimately, giving voice to nature is a form of praxis. By speaking for non-human life, the advocates initiate a conceptual transformation in which nature takes on a greater moral significance in human affairs. Just as the Wolf's Brother represented the wolf people within the Oneida tribe, the advocates act the part of voicing nature's interests in their own communities. In doing so, nature advocates subtly and permanently alter the warp and weft of the complex cultural tapestry of language, society, and its institutions, changing the type and scope of physical actions possible in their environments. The advocates discussed here have succeeded in initiating significant social change, evidenced by the creation of numerous wildlife preserves, the implementation of an Environmental Protection Agency, and the improvement of legislation designed to prevent pollution and protect endangered species.

More importantly, the rhetoric of advocacy has had a dramatic impact on the attitudes and perceptions of the public, making it possible for the discourse of advocacy to reproduce itself and continue independently of the advocate. The demand for environmentally responsible technologies and the popularity of the environment as a political issue suggest that, for many, the voice of nature is becoming internalized, giving rise to a nascent social "ecological conscience." Largely through the force of their metaphors, the nature advocates have initiated an epistemological and moral revolution, one whose success or failure will have far reaching implications for all life on the planet.

BIBLIOGRAPHY

Abbey, Edward. *Desert Solitaire: A Season in the Wilderness*. New York: Ballantine Books, 1968.

_____. *The Monkey Wrench Gang*. New York: Avon Books, 1975.

Adler, Mortimer J. *The Difference of Man and the Difference it Makes*. New York: Holt, Rinehart and Winston, 1967.

Aquinas, Thomas. *Basic Writings of Saint Thomas Aquinas*. Ed. Anton C. Pegis. 2 vols. New York: Random House, 1945.

Aristotle. *The Politics of Aristotle: Translated with an Introduction, Notes, and Appendixes by Ernest Barker*. New York: Oxford University Press, 1962.

Aune, Bruce. *Rationalism, Empiricism, and Pragmatism: An Introduction*. By Bruce Aune. New York: Random House, 1970.

Bakhtin, M. M. *The Dialogic Imagination. Four Essays by M. M. Bakhtin. Edited by Michael Holquist. Translated by Caryl Emerson and Michael Holquist*. Austin: University of Texas Press, 1981.

Bercovitch, Sacvan. *The American Jeremiad*. Madison: University of Wisconsin Press, 1978.

Berlin, James. *Rhetoric and Reality: Writing Instruction in American Colleges*,

- 1900-1985. *With a Forward by Donald C. Stewart*. Carbondale: Southern Illinois University Press, 1987.
- Berthoff, Ann. *Forming Thinking Writing: The Composing Imagination*. Rochelle Park: Hayden Book Company, 1978.
- Bradford, William. *Of Plymouth Plantation. 1620-1647. By William Bradford. Sometime Governor Thereof. A New Edition. The Complete Text, with Notes and Introduction*. Ed. Samuel Eliot Morison. New York: Alfred A. Knopf, 1966.
- Brooks, Paul. *The House of Life: Rachel Carson at Work*. Boston: Houghton Mifflin Company, 1972.
- Burke, Kenneth. *A Grammar of Motives. By Kenneth Burke*. New York: G. Braziller, 1955.
- _____. *A Rhetoric of Motives. By Kenneth Burke*. Los Angeles: University of California Press, 1969.
- Caldwell, Lynton. *International Environmental Policy: Emergence and Dimension*. Durham: Duke University Press, 1984.
- Callow, James T. *Kindred Spirits: Knickerbocker Writers and American Artists, 1807-1855*. Chapel Hill: University of North Carolina Press, 1967.
- Campbell, Sue Ellen. "The Land and Language of Desire: Where Deep

- Ecology and Post-Structuralism Meet." *Western American Literature* 24 (November 1989): 199-212.
- Cantrill, James G. "Communication and Our Environment: Categorizing Research in Environmental Advocacy." *Journal of Applied Communication Research* 21 (February 1993): 66-95.
- Canup, John. *Out of the Wilderness: The Emergence of an American Identity in Colonial New England*. Middleton: Wesleyan University Press, 1990.
- Carson, Rachel. *Silent Spring*. By Rachel Carson. Drawings by Lois and Louis Darling. Boston: Houghton Mifflin Company, 1962.
- Cathecarr, Robert S. "Movements: Confrontation as Rhetorical Form." *Southern Speech Communication Journal* 43.3 (Spring 1978): 233-47.
- Chomsky, Noam. *Cartesian Linguistics: A Chapter in the History of Rationalist Thought*. New York: Harper & Row, 1966.
- _____. *Rules and Representations*. New York: Columbia University Press, 1980.
- Cole, Thomas. *Thomas Cole's Poetry: The Collected Poems of America's Foremost Painter of the Hudson River School Reflecting His Feelings for Nature and the Romantic Spirit of the Nineteenth Century*. By Thomas Cole. Compiled and Edited by Marshall B. Tymn. York: Liberty Cap Books, 1972.
- Collingwood, R. G. *The Idea of Nature*. Oxford: Clarendon Press, 1945.

- Connors, Donald Francis. *Thomas Morton, by Donald F. Connors*. New York: Twayne Publishers, 1969.
- Cooper, James Fenimore. *The Pioneers*. New York: Magnum Books, 1968.
- _____. *The Prairie. With an Introduction and Notes by Donald Ringe*. New York: Oxford University Press, 1989.
- Corbin, Carol. "Nature and Language: A Burkean Analysis of the Role of Symbol Systems in the Environmental Movement." *The Conference on the Discourse of Environmental Advocacy*. Ed. Christine L. Oravec and James G. Cantrill. Salt Lake City: University of Utah Humanities Center, 1992.
- Coolidge, Philip T. *History of the Maine Woods: By Philip T. Coolidge*. Bangor: Furbush-Roberts Printing, 1963.
- Crevecoeur, Hector St. John de. *Letters from an American Farmer*. New York: E. P. Dutton & Company, 1912.
- _____. *Sketches of Eighteenth Century America. The Norton Book of Nature Writing*. Eds. Robert Finch and John Elder. New York: W. W. Norton & Company, 1990. 61-65.
- Descartes, Rene. *The Philosophical Writings of Descartes*. Trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch. Cambridge: Cambridge University Press, 1985.

Dillard, Annie. *Pilgrim at Tinker Creek*. New York: Harper & Row, 1974.

_____. *Teaching a Stone to Talk: Expeditions and Encounters*. New York: Harper Perennial, 1982.

Dudley, Edward, and Maximilian E. Novak, eds. *The Wild Man Within: An Image in Western Thought from the Renaissance to Romanticism*. Pittsburgh: University of Pittsburgh Press, 1972.

Edwards, Jonathan. "A Personal Narrative." *Representative Selections. With Introduction, Bibliography, and Notes*. Eds. Clarence H. Faust and Thomas H. Johnson. New York: Hill and Wang, 1962. 57-72.

Ehrenfeld, David. *The Arrogance of Humanism*. New York: Oxford University Press, 1978.

Emerson, Ralph Waldo. *Nature: Addresses, and Lectures. By Ralph Waldo Emerson*. Boston: Houghton Mifflin Company, 1876.

_____. "The Poet." *Essays by Ralph Waldo Emerson*. Boston: Houghton Mifflin Company, 1903. 1-42.

Evernden, Neil. *The Natural Alien*. Toronto: University of Toronto Press, 1985.

_____. *The Social Creation of Nature*. Baltimore: John Hopkins University Press, 1992.

Flader, Susan. *Thinking Like a Mountain: Aldo Leopold and the Evolution of an*

- Ecological Attitude Toward Deer, Wolves, and Forests*. Columbia: University of Missouri Press, 1974.
- Foreman, Dave. *Confessions of an Eco-Warrior*. New York: Harmony Books, 1991.
- Foucault, Michel. *The Archaeology of Knowledge*. Trans. A. M. Sheridan Smith. New York: Pantheon, 1972.
- _____. "Docile Bodies." *The Foucault Reader*. Ed. Paul Rabinow. New York: Pantheon Books, 1984. 179-187.
- _____. *Madness and Civilization: A History of Insanity in the Age of Reason*. Trans. Richard Howard. New York: Pantheon, 1965.
- _____. *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Trans. Colin Gordon, Leo Marshall, John Mepham, and Kate Soper. Ed. Colin Gordon. New York: Pantheon Books, 1980.
- Gore, Al. *Earth in the Balance: Ecology and the Human Spirit*. New York: Houghton Mifflin Company, 1992.
- Griffin, Donald R. *The Question of Animal Awareness: Evolutionary Continuity of Mental Experience*. New York: Rockefeller University Press, 1976.
- Hamilton, Joan. "Fields of Dust," *Sierra* (January/February 1993): 50-52.
- Hawthorne, Nathaniel. "Ethan Brand." *The Celestial Railroad and Other Stories*. With an Afterward by R. P. Blackmur. New York: Penguin, 1963.

- Hobbes, Thomas. *The Collected Works of Thomas Hobbes. Collected and Edited by Sir William Molesworth.* London: Routledge Thoemmes Press, 1992.
- Hooker, Thomas. "The Heart Must be Humble." 1656. *Redemption: Three Sermons (1637-1656).* By Thomas Hooker. Facsimile Reproductions with an Introduction by Everett H. Emerson. Gainesville: Scholars' Facsimiles & Reprints, 1956. 49-64.
- Jennings, Francis. *The Invasion of America: Indians, Colonialism, and the Cant of Conquest.* By Francis Jennings. Chapel Hill: The University of North Carolina Press, 1975.
- Johnson, Edward. *A History of New England.* 1654. *Original Narratives of Early American History. Johnson's Wonder-Working Providence. 1628-1651.* Ed. J. Franklin Jameson. New York: Charles Scibner's Sons, 1910.
- Johnson, Lawrence E. *A Morally Deep World: An Essay on Moral Significance and Environmental Ethics.* Cambridge: Cambridge University Press, 1991.
- Killingsworth, M. Jimmie and Jacqueline S. Palmer. *Ecospeak: Rhetoric and Environmental Politics in America.* Carbondale: Southern Illinois University Press, 1992.
- _____. "The Discourse of 'Environmental Hysteria.'" *The Quarterly Journal of Speech* 81 (February 1995): 1-19.
- Kolodny, Annette. *The Lay of the Land: Metaphor as Experience and History in*

- American Life and Letters*. Chapel Hill: University of North Carolina Press, 1975.
- Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 2nd ed. Chicago: University of Chicago Press, 1970.
- _____. "Refusal to Compromise: The Case of Earth First!" *Western Journal of Speech Communication* 54.4 (Fall 1990): 473-94.
- Le Guin, Ursula K. *Buffalo Gals and Other Animal Presences*. By Ursula K. Le Guin. Santa Barbara: Capra Press, 1987.
- Leopold, Aldo. *Sand County Almanac. With essays on Conservation from Round River*. Illustrated by Charles W. Schwartz. New York: Sierra Club/Ballantine Books, 1970.
- Lilly, John. *The Mind of the Dolphin: A Non-Human Intelligence*. New York: Avon, 1969.
- Locke, John. *An Essay Concerning Human Understanding*. By John Locke. Abridged and Edited by A. S. Pringle-Pattison. Oxford: Clarendon Press, 1924.
- Manes, Christopher. *Green Rage: Radical Environmentalism and the Unmaking of Civilization*. Boston: Little Brown and Co., 1990.
- Marx, Leo. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. Reprint. London: Oxford University Press, 1977.
- Mather, Cotton. *Diary of Cotton Mather*. New York: F. Ungar, 1957.

- _____. *Frontiers Well-Defended*. Boston: T. Green, 1707.
- Mather, Increase. "The Day of Trouble is Near." 1674. *Departing Glory: Eight Jeremiads by Increase Mather. With an Introduction by Lee Schweningen*. Delmar, New York: Scholars' Facsimiles & Reprints, 1986. 5-33.
- Merchant, Carolyn. *Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: Harper & Row, 1980.
- _____. *Ecological Revolutions: Nature, Gender, and Science in New England*. Chapel Hill: University of North Carolina Press, 1989.
- Miller, Perry. *Nature's Nation*. Cambridge: Belknap Press, 1967.
- _____. *The New England Mind. The Seventeenth Century. By Perry Miller*. Boston: Beacon Press, 1939.
- Monboddo, James Burnett, Lord. *Of the Origins and Progress of Language*. London: T. Cadell, 1809.
- Morgan, Lewis Henry. *League of the Ho-de-no Sau-nee, or Iroquois*. New York: Dodd Mead and Company, 1901.
- Morton, Thomas. *New English Canaan of Thomas Morton. With Introductory Matter and Notes by Charles Francis Adams, Jr.* New York: Burt Franklin, 1967.
- Muir, John. *The Mountains of California. By John Muir. Illustrated From*

- Preliminary Sketches and Photographs Furnished by the Author*. New York: The Century Company, 1917.
- _____. *A Thousand Mile Walk to the Gulf*. By John Muir. Edited by William Frederick Bade. With Illustrations. Boston: Houghton Mifflin Company, 1916.
- _____. *The Yosemite*: By John Muir. New York: The Century Company, 1912.
- Naess, Arne. "Deep Ecology and Ultimate Premises." *Ecologist* 18 (1988): 128-131.
- Nash, Gary B. "The Image of the Indian in the Southern Colonial Mind." *The Wild Man Within: An Image in Western Thought from the Renaissance to Romanticism*. Ed. Edward Dudley and Maximillian E. Novak. Pittsburgh: University of Pittsburgh Press, 1972. 55-86.
- Nash, Roderick. *Wilderness and the American Mind*. New Haven: Yale University Press, 1967.
- Nietzsche, F. "Truth and Lies in a Non-Moral Sense." *The Rhetorical Tradition: Readings from Classical Times to the Present*. Eds. Patricia Bizzell and Bruce Herzberg. Boston: St. Martin's Press, 1990. 888-896.
- Norton, Bryan G. "The Constancy of Leopold's Land Ethic." *Environmental Pragmatism*. Eds. Andrew Light and Eric Katz. New York: Routledge Press, 1996. 84-104.
- Novak, Maximillian E. "The Wild Man Comes to Tea." *The Wild Man Within*:

An Image in Western Thought from the Renaissance to Romanticism. Ed. Edward Dudley and Maximilian E. Novak. Pittsburgh: University of Pittsburgh Press, 1972. 183-222.

Oravec, Christine. "Conservationism Vs. Preservationism: The 'Public Interest' in the Hetch Hetchy Controversy." *The Quarterly Journal of Speech* 70.4 (November 1984): 444-458.

Oravec, Christine L., and James G. Cantrill, eds. *The Conference on the Discourse of Environmental Advocacy*. Salt Lake City: University of Utah Humanities Center, 1992.

Parker, Theodore. "American Machinery--Matteawan." *Scientific American* 5 (April 1850): 253.

Pinchot, Gifford. *Breaking New Ground*. New York: Harcourt, Brace and Company, 1947.

Richards, I. A. *The Philosophy of Rhetoric*. New York: Oxford University Press, 1936.

Ringe, Donald A. *The Pictorial Mode: Space & Time in the Art of Bryant, Irving & Cooper*. Lexington: University Press of Kentucky, 1971.

Rosenblatt, Louise M. *The Reader, the Text, the Poem: The Transactional*

Theory of the Literary Work. Carbondale: Southern Illinois University Press, 1978.

Scott, Robert L. and Donald K. Smith. "The Rhetoric of Confrontation." *The Quarterly Journal of Speech* 55.1 (February 1969): 1-8.

Shea, Daniel B. "'Our Professed Old Adversary': Thomas Morton and the Naming of New England." *Early American Literature* 23 (Spring 1988): 52-69.

Short, Brant. "Earth First! and the Rhetoric of Moral Confrontation." *Communication Studies*. 42.2 (Summer 1991): 172-188.

Siebert, Horst. *Economics of the Environment*. Lexington: D. C. Heath and Company, 1981.

Slovic, Scott. *Seeking Awareness in American Nature Writing: Henry Thoreau, Annie Dillard, Edward Abbey, Wendall Berry, Barry Lopez*. Salt Lake City: University of Utah Press, 1992.

Smith, Henry Nash. *Virgin Land: The American West as Symbol and Myth*. Cambridge: Harvard University Press, 1970.

Stewart, Frank. *A Natural History of Nature Writing*. Washington, D.C.: Island Press, 1995.

Symcox, Geoffrey. "The Wild Man's Return." *The Wild Man Within: An Image*

in Western Thought from the Renaissance to Romanticism. Ed. Edward Dudley and Maximillian E. Novak. Pittsburgh: University of Pittsburgh Press, 1972. 223-48.

Thomas, Keith. *Man and the Natural World: A History of Modern Sensibility*. New York: Pantheon Books, 1983.

Thoreau, Henry David. *The Maine Woods*. Boston: Houghton Mifflin Company, 1906. Vol 3 of *The Writings of Henry David Thoreau*. 20 vols. 1892-1906.

_____. *Walden and Other Writings of Henry David Thoreau: Edited, with an Introduction by Brooks Atkinson. Foreward by Townsend Scudder*. New York: Random House, 1937.

Underwood, Paula. *Who Speaks for Wolf: A Native American Learning Story*. By Paula Underwood. Art by Frank Howell. San Anselmo: A Tribe of Two Press, 1991.

White, Hayden. "The Forms of Wildness: Archaeology of an Idea." *The Wild Man Within: An Image in Western Thought from the Renaissance to Romanticism*. Ed. Edward Dudley and Maximillian E. Novak. Pittsburgh: University of Pittsburgh Press, 1972. 3-38.

Webster, Noah. *A Collection of Essays and Fugitive Writings (1790): By Noah*

Webster. A Facsimile Reproduction with an Introduction by Robert K. Peters.

Delmar, New York: Scholars' Facsimilies & Reprints, 1977.

Whitman, Walt. "Passage to India." *The American Tradition in Literature*. Ed.

George Perkins, *et al.* 6th ed. 2 vols. New York: Random House, 1985. 2:91-96.

Wigglesworth, Michael. "Gods Controversy with New-England." *Proceedings of the Massachusetts Historical Society* 12 (1871): 83-93.

Williams, David Cratis. "Nature as Text." *The Conference on the Discourse of*

Environmental Advocacy. Ed. Christine L. Oravec and James G. Cantrill. Salt

Lake City: University of Utah Humanities Center, 1992.

Wood, Richard G. *A History of Lumbering in Maine 1820-1861: By Richard G.*

Wood. With a New Introduction by David C. Smith. University of Maine Studies.

33. Orono: University of Maine Press, 1971.

Wordsworth, William. *The Prelude*. 1850. *The Norton Anthology of Literature*. 5th

ed. Ed. M. H. Abrams, *et al.* 2 vols. New York: W. W. Norton & Co., 1986.

2:227-312.

Worster, Donald. *Nature's Economy: A History of Ecological Ideas*. 2nd ed.

Cambridge: Cambridge University Press, 1994.