

THE ENVIRONMENTAL PERSPECTIVE:
METAPHOR AND EMPATHY IN LEOPOLD'S LAND ETHIC

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1st Reader Signature

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ABSTRACT

Aldo Leopold's land ethic takes root in both metaphor and empathy. The use of metaphor and empathy in cultivating the land ethic has profound implications for our relations with the environment, both personal and political. I hope to show that these implications are positive and help us to realize the ethical extension vital to ensuring human harmony with nature. In pursuit of this, I first provide a deeper look into metaphor, empathy, alterity, and their overlap. I then put these ideas into the context of Leopold's land ethic as described in *A Sand County Almanac*. Then I dissect the philosophical implications of metaphor and empathy in an environmental ethic. Finally, I suggest representation as a pragmatic instantiation of the ethic prescribed by metaphor and empathy. At the end of all, I think, is a compelling case made for the vital integration of more subjective modes of inquiry into the realm of ethics.

Ch. 1: Introduction

Although an ecologist by trade, Aldo Leopold is probably best known for his foray into moral philosophy. In his seminal work *A Sand County Almanac*, Leopold takes as a starting point that all ethics rest upon the premise “that the individual is a member of a community of independent parts.” (1949, p. 203) Tracing the genealogy of this conception of ethics back, Leopold posits that the ethics we find embedded in our society are the result of a constant evolution that constitutes extensions of our moral sensibilities from our immediate kin, to progressively more distant communities. In Leopold’s eyes the next extension in this ethical lineage will encompass the natural community, or the Land as he denotes it. However, as science will attest, evolution takes its time.

Leopold’s prose is rich with a sense of urgency. Half a decade later, this sense of urgency hits very close to home. Results of studies continue to make us aware of the exponentially increasing speed with which we approach a critical point in terms of resource availability. At this point, it seems that we can no longer wait for evolution to do its thing. Our relationship with the Land must change if human life is to continue in the way we have come to know it. And it must change in a way that affirms the position of the natural community in the human realm of obligation. To this end, Leopold outlined the land ethic. The land ethic states, “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.” (Leopold, 1949, p. 225) It provides a sort of moral measuring stick to guide our actions. Unfortunately this is the bumper sticker land ethic, albeit for a very big bumper. The actual concepts underlying Leopold’s land ethic are far more compelling.

Furthermore, they provide a building point from which we can work to realize the ethical extension Leopold endorses.

In light of this dire situation, a promising and natural point of departure for achieving this ethic is the ethics that we use in our interactions with other humans. It is my belief that of all the ways we engage our fellow humans, empathy is the strongest and most inclusive. We arrive at an obstacle, however, when we try to adapt empathy to an environmental ethic. Empathy, at least traditionally and in practice, is exclusive to human-human interactions. Metaphor can be employed in order to overcome this obstacle. A close look at Leopold's writings reveals that the underpinnings of the land ethic, the praxis that led Leopold to the land ethic, are characterized by an inclination to view nature metaphorically in a way that facilitates empathy.

In his paper on the land ethic Michael Nelson makes an important point. "Long lasting ethical change can only be effected by means of the modification of one's worldview, the way one conceptually visualizes the world." (Nelson, 1998, p. 742) The metaphorical nature of the land ethic ensures the longevity of it, as metaphor invites us to change the way we conceptually view the world. It may be the case that the causal link between metaphor and better treatment of the environment is murky. Metaphor is not restricted to just rhetoric but also cognition. And how we cognitively interpret our world dictates how we act in it. I return to Nelson's article for a concise demonstration of this point. "When we perceive of the world as a machine we apprehend nothing wrong in treating it like one." (1998, p. 742) And it is this metaphor of the natural world as a machine that has caused much of the abuse. Our understanding of machines does not map well to the reality of the natural world. Humans make machines and thus have some sense

of privilege in manipulating the working parts. Most obvious is the instrumentality of the machine. The machine has a purpose for which it was designed. The machine ceases to have worth the moment it can no longer realize this purpose. All of these attributes of the human-machine relation implicit in the metaphor are problematic for our ethical treatment of the environment.

If we want to answer the call that Leopold has made, we must not only rethink the current metaphors we use to understand nature but also tread new ground with them. We must embrace metaphor as a tool to constantly turn our perspective on its side in order to see the world, and our place in it, in novel ways. Emmanuel Levinas is appropriate to invoke at this moment. Levinas noted, “ethics is an optics” (1969, p. 23). I think he means this in two ways, the first being that ethics provides a lens through which we can look at the world. But ethics can also constitute a new perspective entirely.

Leopold’s land ethic calls for the cultivation of “ ‘perception,’ a blend of training, hermeneutic skill, and identification with the natural world.” (Hinchman, 1995, p. 225) Once we identify with the natural world, we can empathize with it. Empathy mobilizes Leopold’s own ecological definition of ethics as “ limitation on freedom” (1949, p. 202). At first, such a definition might seem unattractive at best and undemocratic at worst, but the definition of freedom we use changes this visceral reaction. Levinas defined freedom as the maintenance of “oneself against the other, despite every relation with the other to ensure the autarchy of an I” (1969, p. 46) If we substitute this definition into Leopold’s assertion we come to understand ethics as an invitation to allow the autarchy of the I to take secondary importance. We open ourselves up to empathically take the perspective of nature. Empathy has us pause in this struggle of assertion against the other. Empathy has

us transcend the boundaries between self and other, to the benefit of all. Empathy as the dialogue between self and other “involves a calling into question of oneself, a critical attitude which is itself produced in face of the other and under his authority” (Levinas, 1969, p. 81). Self-critique in this moral experience leads to expanded notions of moral community and our place in it as well as personal growth.

The use of metaphor and empathy in cultivating the land ethic has profound implications for our relations with the environment, both personal and political. I hope to show that these implications are positive and help us to realize the ethical extension vital to ensuring human harmony with nature. In pursuit of this, I first provide a deeper look into metaphor, empathy, alterity, and their overlap. I then put these ideas into the context of Leopold’s land ethic as described in *A Sand County Almanac*. Then I dissect the philosophical implications of metaphor and empathy in an environmental ethic. Finally, I suggest representation as a pragmatic instantiation of the ethic prescribed by metaphor and empathy. At the end of all, I think, is a compelling case made for the vital integration of more subjective modes of inquiry into the realm of ethics.

Ch. 2: Metaphor, Empathy, and Their Overlap in the Natural Experience

Metaphor

Metaphor can be described as a method through which we understand the more abstract realms of reality in terms of the things that are more easily comprehended. In its most simple form, metaphor appears as an “x=y” statement, where x and y share some similarity, or the relation between x and y brings into view patterns that can augment our understanding of one or both entities. In most cases, metaphors are discussed strictly as poetic devices. One might say, for example, “my love is an ocean”. In this case love is the abstract concept (*target*) that is being understood in terms of the ocean (*source*), a concept that is more immediately describable. The reader of this line is then invited to draw from their understanding of what makes an ocean an ocean, and apply that understanding in order to better grasp the abstract concept of love. Examples of these attributes might include the presence of waves, depth, vastness, tidal motion, and tranquility coupled with destructive force. The author of the metaphor might use the tidal aspect of the ocean to illustrate the way that his feelings of love ebb and flow, but the unique function of the metaphor is that it leaves the reader free to establish even more patterns between the abstract and concrete beyond that which is expressly described by the author, through the reader’s own experience with both concepts. Perhaps the reader has more personal experience with dysfunctional romantic relationships. Their interpretation of the metaphor will probably involve bringing the destructive elements of the ocean over to the abstract concept of love. In this way, metaphor is a dynamic process. Interpretation of metaphor is context dependent, and differs from person to person.

While metaphor is traditionally thought of as strictly a linguistic phenomenon, the intimate relationship between language and thought means that metaphor is also a cognitive phenomenon. That is to say that the way we think about and understand both the concrete and abstract is through the construction of metaphors. Therefore, the use of metaphor is not restricted to the aesthetic realm of poetic language.

In their landmark work, *Metaphors We Live By*, George Lakoff and Mark Johnson argue, quite convincingly, “Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (2003, p. 3). James Geary takes this notion further when he says “Metaphor is a way of thought long before it is a way with words” (2011, p. 3). In his contribution to the dialogue concerning metaphor, *I is an Other*, Geary draws out the connections between metaphor and action in an example of the stock market. The terms used to describe the behavior of the stock market are frequently yet subtly metaphorical. These descriptions vary with situation. For instance, if the stock market is experiencing a period of growth it is depicted as *climbing*. When the opposite is true, stocks *plummet*. The use of these words is often taken for granted but upon closer inspection it becomes clear that this diction attributes agency to the stock market on days where increases are being manifested, and strips the stocks of this agency as soon as they start to lose their value.

Because a metaphor like ‘the NASDAQ climbed higher’ suggests a living thing pursuing a goal – after all, only something that is alive and determined, can climb – people expect the upward trend to continue. If, for example, house prices are relentlessly described as *climbing* higher and higher, homeowners might unconsciously assume that the steady ascent is unstoppable. They might feel confident in, say, taking out mortgages they really can’t afford in the expectation that *soaring* property values will eventually make unsustainable debt look like a smart investment.

(2011, p. 31)

Geary's example shows the promise but also the danger present when thinking metaphorically. The metaphorical conceptualization of the stock market played a significant role in many of the stock market crashes. People who had internalized this metaphor began to invest according to this false notion that the stock market was rising on its own volition, and thus would continue to rise. This is just one of many examples where our metaphorical understanding of things dictates our actions. More commonly discussed is the *time is money* metaphor that has us *budgeting, wasting, saving, and spending* time. This metaphor has us treat time differently than a metaphor that compared time to something that replenishes itself. The ability of metaphor to take over one's entire conception of something can radically influence the way a person responds to the thing. This is why metaphor is such a powerful tool.

In the situation described above, by conceptualizing the stock market as having agency, like a human, that it does not actually have, we interact with it differently. Within the context of the environmental crisis, perhaps if we used metaphor to conceptualize our natural environment as having attributes that map over to human existence, we would treat it in a way that reflects these attributes. Essentially metaphor could lead us to think of the environment as being similar to humans, which would facilitate the carrying over of certain moral attitudes that are currently only descriptive of inter-human relations. This, in effect, would expand our realm of moral obligation to include the natural world.

The process by which the linguistic mechanism of metaphor leads to action can be observed externally through experiments done to study priming and automaticity. The idea behind priming is that if a person is to "activate concepts in one context" there will be "passive effects of this activation in subsequent tasks" (Bargh, 2000, p. 14). Early

psychological experiments exploring priming found that after having study participants read a list of words, and then a story about a man, the list of words affected whether they judged the man positively or negatively. In short, “What had been primed was not just the single, concrete lexical memory locations corresponding to the stimulus words, therefore, but also the abstract trait concepts. These in turn became more likely to capture the relevant but ambiguous behavioral information, thus slanting final impressions in the positive or negative direction” (Bargh, 2000, p. 4). Metaphor acts as a primer. It activates concepts from the source within the response to the target. So if one constructs a metaphor using source concepts they hold as positive, this positive valuation will be transferred to the target. For this reason, it is critical to construct metaphors carefully if the desired result is moral development. Joni Seager conveys the damage environmental metaphors can cause when she inspects the “mother earth” metaphor that seems to be ubiquitous in environmental movements (Seager, 1993). Some people love their mothers and treat them with the highest regard. They can be described as having positive valuations of the source that they then carry over to positively value the target, the earth. But there are others who don’t have fond memories of their mothers. For them, mother is the person who punishes them or cleans up after them. These sentiments do not bode well for the protection of the environment. Regardless of the impressions you prime with a metaphor it is important to think of the consequences. Seager teases out the consequences of the mother earth metaphor when she rightfully points out “if the earth is really our mother, then we are its children, and cannot be held fully accountable for our actions.” (1993, p. 219). Such a conclusion is counterproductive to the goals of the land ethic.

Much of the contemporary discourse on the human relationship with the environment is dominated by Western science. In light of this, some might cringe at involving such subjectivities as metaphor in this discussion, previously dominated by positivism. However, metaphor has been pivotal in many of the most important scientific discoveries. Many of these discoveries occurred because of the use of models which “must be understood as extended metaphors – not literally true, but useful representations of the phenomena” (Kittay, 1987, p. 7). Examples of metaphors’ utility in the scientific quest include the “billiard – ball model of gases” and “the wave models of sound and light” (Kittay, 1987, p. 7). In each of these cases, the metaphor “gives a certain comprehension of one aspect of the concept and hides others.” (Lakoff and Johnson, 2003, p. 221) For example the *gas molecules are billiard balls* metaphor says something about the movement of gas molecules in relation to their collisions with each other. It “hides” or says nothing about the aspects of composition or appearance of the gas molecules, for example. For these aspects, the metaphor might not hold. Gas molecules are not made of ceramic and they are not numbered. But for the intent of describing the motion of the gas molecules, the metaphor is illuminating. A similar process can be carried out for the *light is a wave* metaphor. Without these metaphors, the highly abstract concepts scientists are interested in describing remain, well, abstract.

In recent years, the surge of interest in biomimicry reflects the importance and utility of metaphor, not just in creating obscure poetic phrases, but also in providing environmentally sound solutions to increasing technological demands. Biomimicry looks for analogs between the natural world and the human world to offer solutions that are evolutionarily tested with the goal of “harnessing the observed physiological and

neurological architectures of nonhuman life to solve material problems that span species and spaces.” (Johnson, 2010, p. 179) Johnson gives a brief example in her paper illustrating how the ability of lobsters to detect chemical trails under water could be used to help in cases of oil spills. By using the lobster as a source, biomimicry takes the attributes that are specific to this ability to detect chemicals and finds ways to carry them over to the target; robots that would perform this ability in the case of oil spills. In examples of biomimicry like this, metaphor leads to advances in technology that have been tested and proven effective by evolution. I offer these examples to show that the involvement of metaphor in understanding man’s interaction with nature should not be greeted with disdain. Metaphor is, in fact, a legitimate source of knowledge that has an important role to play in informing the way we perceive of our connections to the natural world.

Empathy

Empathy is defined as “an affective response more appropriate to another’s situation than one’s own” (Hoffman, 2000, p. 4). It is aroused when one sees another in distress. When discussing the empathic response, I will use the term *observer* to denote the entity who empathizes, and the term *victim* to refer to the entity who is the receiver of the empathy. Identification between observer and victim is critical to the potency and success of empathy (Hoffman, 2000, p. 197). When I use the term ‘identification’, I am getting at the process of identifying similarities between one’s distinct self and the other. If one perceives no similarities it is impossible to empathize. In the case of empathy, the more profound the similarities, the stronger the empathic distress. This process of identification is made possible by “the direct association of cues in the victim’s situation

that remind observers of similar experiences in their own past and evoke feelings in them that fit the victim's situation" (Hoffman, 2000, p. 47). If one is to take full advantage of empathy as a precursor to moral treatment of others, one has to be sufficiently self-aware to recognize these cues, and also experienced enough to have a wide array of direct associations to draw on. In this sense, experience is essential to cultivating empathy.

Like most emotions, empathy exists in gradations. There are basic forms of empathy and complex forms. The most basic instance of empathy is what is called reactive newborn cry. It has been shown that newborn babies will cry when they hear the cry of another baby. This cry occurs with no provocation to the observing baby, other than the crying of the victim baby. Responding as such is consistent with the definition of empathy provided, in that it is a response that is more appropriate to the victim than to the observer. As children develop, so does their ability to empathize in more sophisticated ways.

Martin Hoffman (2000) outlines the subsequent stages in empathic development as egocentric empathic distress, quasi-egocentric empathic distress, veridical empathic distress, and empathy for another's experience beyond the immediate situation. Egocentric empathic distress is characterized by attempts at alleviating distress "as though they themselves were in distress" because of a lacking in a "clear distinction between self and other" (Hoffman, 2000, p. 6). Quasi-egocentric empathic distress recognizes that the distress belongs to the victim, but has the observer respond in the way they would if the distress were their own. Veridical empathic distress allows for awareness of the independent and unique inner state of the victim. Finally, empathy beyond the immediate situation occurs when the observer can imagine the victim's life as

a whole narrative with a general story line that is either happy or sad (Hoffman, 2000, p. 6). Reaching this stage liberates empathy from the immanent encounter of the observer with the victim and lets it pervade relationships more freely.

These notions of empathy are most useful in understanding the psychological activity occurring when one empathizes with another. However, it is not the only way with which one can understand empathy. Tracing the ancestry of the concept of empathy yields fruitful results that enrich the concept of empathy. The origin of the word empathy is in fact the German word *Einfühlung*. In German, *Einfühlung* is translated literally as “feeling ‘in’ with another’s mood” (Denham, 2000, p. 156). This definition stays tethered to the process of empathy, while that offered by Hoffman is more concerned with the external manifestations and results. The German *Einfühlung* became the English *empathy*. If one sees this as a portmanteau of the words “esthetic” and “sympathy”, the concept of empathy becomes even more vivid. It is in this conception that empathy was used to describe the esthetic experience of an artist or an observer of art. It is the source of the emotional effect of a piece of art. The observer feels himself into the subject of the art (Vischer, 1873). Through this perspective taking, the observer has a change in emotional state, where the final state is more appropriate for the subject than the observer. (Nietzsche, 1967)

By identifying with the situation of the other, empathy momentarily dissolves the barriers between self (observer) and other. This process of transgression is identical to the process of metaphor. Both entail understanding something abstract, in this case the life situation and state of mind of another individual, through terms of something more concrete, in this case the person’s own life experience.

Congruencies Between Empathy and Metaphor

Initially, one might wonder what a poetic device and moral behavior have to do with each other. Upon closer inspection, however, it becomes clear that empathy and metaphor are both forms of pattern recognition. Empathy is dependent on the recognition of patterns between observer and victim. To start with the most simple forms of empathy, that between two members of the same species, this pattern can be simply kinship. Hoffman calls this propensity to first empathize with those most immediately similar to oneself “familiarity bias” (2000). The basis for this bias is that kin are “close in personal touch with each other and have similar life experiences” (Hoffman, 2000, p. 206). Pattern recognition within this context does not require much of the observer. However, in order to feel empathy for entities outside of this kin group, recognizing patterns depends on the observer’s imaginative perspective taking.

Metaphor uses this same type of imagination, seeking out common patterns between source and target. This revelation substantiates the claim that empathy is metaphorical in nature. For both processes, experience provides a database from which to draw these patterns and similarities. The more experiences, the larger the database, the more patterns to be recognized, creating a stronger sense of familiarity, which consequently activates the disposition to empathize first and foremost with those you are familiar with.

Metaphor and empathy share the same structure. It is often held that structure dictates function. In the case of a shared structure, like that of metaphor and empathy, the function is also shared. Put simply, empathy is fundamentally metaphorical. Both

concepts involve taking an experiential gestalt that is familiar to a person and using it to structure and understand the state of another. In metaphor the experiential gestalt tends to vary from case to case, but with empathy, the experiential gestalt called upon is always that of ones' own life experience.

In addition, empathy and metaphor both rely on context. In order to empathize, one must have a context within which to see the victim. For example, it is much harder to empathize with just a normal person window-shopping in the city. However, if we figure out that the person has just recently lost their job, this action takes on new meaning that might allow one to empathize. Perhaps what appears as window-shopping is really a moment of concern for their new financial situation. Regardless of what it actually is, context provides a window through which the observer can imagine into the position of the victim in order to empathize.

In a similar way, a metaphor needs context to be understood. Take the metaphor *the wind is a lion*. Without context to show which patterns and similarities the metaphor relies on, the metaphor has no meaning, and remains a nonsensical statement. Context clues the reader in to the attribute of the source that is being translocated to the target. Is it the furriness of the lion, or its roar, or its speed? The sentence preceding or following the metaphor might make another statement about the inability to hear over the wind, or the strong effect it had on the trees. This context points out the nexus between the target and source. Without it readers might be left to assume that it is indeed the furriness of the lion that is similar to the wind, which is not particularly meaningful beyond a superficial aesthetic. One might call a metaphor relying only on the transfer of "furriness" to the wind a "live metaphor." It is novel. It has not been delegated a literal meaning that

reflects its originally metaphoric one. However, the metaphorical “howl” or “roar” of the wind is dead in that it is used in commonplace with no confusion because its metaphorical meaning has been petrified into a literal one. Part of the beauty of metaphor is that one can take all of these attributes of the wind, that comprise both live and dead metaphors and create a conceptualization of the wind that is wholly unique and novel.

This collection of dimensions active in the interpretation of a metaphor are “experiential gestalts” that provide ways of organizing experiences into structured wholes” (Lakoff and Johnson, 2003, p. 81). When we interpret metaphor, we superimpose the experiential gestalt of the source onto the concept of the target. Thus the vividness of a metaphor is directly and positively correlated with experience, as experience expands the gestalt with which we interpret the metaphor, resulting in more interpretations that are also more nuanced. These experiential gestalts, when used in the creation and interpretation of metaphor can be seen as “systems of associated commonplaces” (Kittay, 1987, p. 17). They are the collection of patterns and similarities that form the foundation of the metaphor. They mediate the metaphorical process, allowing one to move gracefully between source and target.

Empathy is facilitated by constructing effective metaphors. In this case, the efficacy of a metaphor is dictated by its ability to establish sufficient patterns and similarities so that the distinct boundaries between self and other become temporarily permeable. The grace with which this is accomplished is also a testament to the strength of a metaphor. One should not be required to do a significant amount of intellectual gymnastics to accept the premises of a metaphor. The most effective metaphors for the arousal of empathy are what one might call first person metaphors, which force the self to

relate to the other in a way that is meaningful. This is essentially the definition of empathy. Once aroused, empathic distress can cause the observer to act in a way that alleviates the distress of the other. Thus, the ethic engaged in through empathy takes the form of reciprocity in the sense that what one does to alleviate the distress reflects what one would wish done for them if in that same situation. The arousal and consequent alleviation of empathic distress is what makes empathy a powerful tool for relating to the environment, if we wish to do so in a harmonious way. While it is a powerful tool, it is not immediately clear whether or not it is applicable to this specific problem. This is because empathy is usually confined to relationships between humans. However, metaphor is a way of adapting the tool of empathy to the issue of encompassing the natural world in our sphere of moral consideration.

Nature as the Other

Metaphor and empathy are both conceptually tied to the notion of alterity as understood by the French philosopher Emmanuel Levinas. Levinas defines alterity as “the radical heterogeneity of the Other” (1969, p. 36). While there is no explicit definition of the Other, Levinas describes it as “the Stranger who disturbs the being at home with oneself...Over him I have no *power*. He escapes my grasp by an essential dimension, even if I have him at my disposal.” (1969, p. 39) This comes to play in metaphor if we think of the source in a metaphor as the self, and the target as the Other. The target is radically different in some way from the source, although not in an antithetical manner. This difference is attested to in the somewhat mathematic formula of metaphor where $x = y$. There has to be difference, a separation for “without separation there would not have been truth” (Levinas, 1969, p. 60). Truth, of metaphors or

otherwise, then arises from the relation between the source and the target, the Self and the Other.

Empathy itself, if not taken to be foundational, is a derivative of the interaction between self and Other. The analog between alterity and empathy is much clearer. The self is the observer while the Other is the victim. By taking the perspective of the victim, by feeling ourselves into the Other, we see the face of the Other. For Levinas:

The face opens the primordial discourse whose first word is obligation, which no “interiority” permits avoiding. It is that discourse that obliges the entering into discourse, the commencement of discourse rationalism prays for, a “force” that convinces even “the people who do not wish to listen” and thus founds the true universality of reason.

(1969, p. 201)

This primordial discourse is the source of empathic distress. It is clear that we have an unavoidable obligation to the Other. When we shirk this responsibility we feel empathic guilt. This “force that convinces even the people who do not wish to listen” makes empathy a powerful tool for an environmental ethic. However, this presupposes that the environment, nature, is an Other. Looking back to the description of the Other provided earlier, this presumption can easily be substantiated. The experience of being in nature does have an element of fear caused by this disturbance of “the being at home with oneself” (Levinas, 1969, p. 39). And just as we find nature at our disposal when we extract our resources from it, there is something that we cannot take, something that is ineffable. There are profound implications to this establishment of nature as the Other, most important of which is the obligation inherent in the encounter with the face of the Other.

Metaphor and Empathy In Our Relationship with the Environment

In looking at metaphor and empathy in their traditional habitat it is clear that both are very powerful cognitive implements. Each is successful in creating an understanding previously inexistent. But how exactly do they inform our relationship with the environment? Metaphor has several roles. The first is that of aiding us in approximating a more complete understanding of the natural world around us. In his *Critique of Pure Reason*, Kant reveals that “reason has insight only into that which it produces after a plan of its own” and that “reason... must approach nature in order to be taught by it. It must not, however, do so in the character of a pupil who listens to everything his teacher has to say, but of an appointed judge who compels the witness to answer questions which he himself has formulated” (Kant, 1950, pp. 10-11). If one takes Kant’s words to be valid, then they accept that reason cannot provide the complete picture of our world. Reason must be augmented by something more vital and dynamic. For John Shotter this something arises from:

“A view of communication, of language, as an extension of our spontaneously expressive-responsive bodily activity, a view that orients us away from language as consisting primarily in terms of words and word forms – forms that can be iterated identically over and over again – and toward language as an elaboration and refinement of our expressive gestures, both mimetic and indicative.”

(2006, p. 107)

Shotter views language as a direct reflection of our physical experience in our environment. The utterances, that are language, are part of how we respond to stimulus in our environment. Consequently these utterances will change as the environment changes, and as our interactions with it change. Metaphor recognizes the inseparability of our reality, as shaped by our existence in a physical world, from the way we communicate about this reality. Metaphors “are grounded in our constant interactions with our physical and cultural environments.” (Lakoff and Johnson, 2003, p. 119) The ‘expressive-

responsive bodily activities' inform the experiential gestalts that are used in the construction of metaphor. Metaphor provides a fragment of knowledge that is itself incomplete without reason. The two are complementary counter parts to our understanding of our own world. Shotter continues, saying that "it is only in our ongoing, dynamic, responsive, living relations to the expressions of the others and othernesses around us that a sense of their inner lives can become present in our human world." (2006, p. 107) The sense Shotter alludes to arises from empathy. Through empathy, we feel our selves into, or take the perspective of the other, in order to get this sense of their inner states.

But empathy has its limits within the application I have proposed for it. Empathizing with the natural world requires empathizing with nonhumans and inanimate entities. The similarities between these entities and humans are not readily available in a way that facilitates immediate familiarity bias. This is where metaphor comes in. Metaphor's second role is to make empathy in these situations possible. Metaphor helps to construct the face of the Other in order that one may respond empathically upon seeing this face. Anthropomorphism, a specific form of metaphor, is the architect of this structure. Anthropomorphism falls under the subgroup of personification, the unique case of metaphor when "we are seeing something nonhuman as human" (Lakoff and Johnson, 2003, p. 33). Humans already have a highly developed propensity for this type of metaphor. We often attribute human emotions to our cars, pets, and other objects we encounter in our daily life. Furthermore, much of the way we describe the world around us is through anthropomorphisms. We tend to perceive a:

[L]andscape entirely free of human presence as thick with human faces: on a slab of rock, in the gnarl of a tree knot, in the waxing moon, in a pendulous flower. The

lexicon used to describe the human body is pervasive in our descriptions of nature: the shoulder of a hillside, the arms of a tree, the fingers of a stream, the waist of a peninsula--all examples of what literary criticism calls "personification."

(Horowitz, 2007, p. 1)

Such anthropomorphism must be put to a use greater than just distinguishing landmarks.

If we use this anthropomorphic tendency to see the faces in the landscape, then we can theoretically be obligated to these faces, through their alterity, or "the radical heterogeneity of the Other" (Levinas, 1969, p. 36). This obligation would result in empathic treatment of the environment. With this treatment comes an ethic of reciprocity. We would be able to see the dire issues that face our environment from the perspectives of these faces, and respond, ideally, with veridical empathic distress. Alleviating this veridical empathic distress would constitute an environmental ethic that is based not on the instrumentality of the natural world for humans, but on our own desire to assuage empathic distress.

Ch. 3: *A Sand County Almanac*: An Illustration

In an attempt to ground these fairly abstract concepts, I will guide the reader's attention to Aldo Leopold's *A Sand County Almanac*. This canonical text contains within its pages an instantiation of the perspective I suggest is possible with metaphor and empathy. *A Sand County Almanac* chronicles Leopold's daily musings while on his farm in Wisconsin. Leopold begins his montage with the January thaw. Without a trace of self-importance, Leopold describes each sign of life he sees and the curiosity with which he pursues each gesture of the land. Although Leopold was in his fifties when writing this, he shows a child-like fascination with the land that allows him to make ecological observations without getting mired in technicalities. This tone also endears him to the reader as a trustworthy narrator. Consequently, it is crucial to the success of Leopold's goal of reaching an audience broader than the scientific community.

The first page of *A Sand County Almanac* demonstrates Leopold's unique perspective. Upon seeing a skunk's track in the snow, Leopold remarks, "The track is likely to display an indifference to mundane affairs uncommon at other seasons...I follow, curious to deduce his state of mind and appetite, and destination if any" (1949, p. 3). This example shows the process with which Leopold carries out his ecological observations. It begins with a close and intimate observation that is pursued out of a simple motive, curiosity.

The wording in this passage is also of particular interest as it employs the rhetorical device of anthropomorphism. As noted earlier, anthropomorphism is a specific form of metaphor involving personification. In this particular instance, the metaphor says that the skunk's movement can be causally explained in terms of human emotions such as

“indifference”. The metaphor attributes “mental states (especially cognitive and emotional states) similar to human attributes and mental states” (Horowitz, 2007, p. 1) to the skunk. This is one of the early examples that show how Leopold perceives of the natural world around him. He sees each action and event as having a cause that originates from the agency held by the members of the natural world, such as the skunk. This is a striking difference from the traditional approach to considering animals. The ability to make decisions and not just act impulsively in response to biological inputs is a trait that many tout as being the distinguishing factor that sets apart humans from animals. In this instance, Leopold rejects this notion. He gladly entertains the idea that the skunk goes through a strikingly human thought process on his way through the snow. This perspective brings the skunk into the realm of moral consideration for Leopold.

When Leopold uses metaphor to point out patterns between natural phenomena and human life, he is able to peer into varying degrees of the reality of nature. Each metaphor is a bridge to the natural world around him. Once crossing over the gulf of otherness, Leopold is able to empathize with his Wisconsin farm as a collection of animate and inanimate players in the complex relationships that make up an ecosystem. A beautiful example of this process is illustrated in his observation of the geese that stop by in March:

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.

(1949, p. 20)

In this passage, Leopold recognizes the similarity between geese flying by themselves and humans who are without their loved ones. This metaphor, established by the observable pattern of solitude, allows Leopold to easily attribute his understanding of loneliness from a human perspective to the inner state of these geese. This, coupled with the goose's honk, triggers empathic distress in Leopold. He is able to imagine the emotional state of the goose through extension of the metaphor and by drawing on previous experience.

Empathic distress is usually followed by action taken to alleviate the distress the victim (target of empathic response) feels, and if not, usually results in empathic guilt. Both are constructive outcomes because even the guilt can lead to an attempt to rectify the situation later on, or a mindfulness that will benefit future recipients of empathy. As the passage continues, we see Leopold's empathic distress leads him to action:

After my students and I had 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.

(1949, pp. 20-21)

Here we see Leopold participating in a cycle of metaphor, empathy and ecology. It is a cycle because the end result does not depend on which of the three components you begin with. In this case, Leopold begins at metaphor, which allows him to perceive of the lone geese in a way that facilitates an empathic response. Metaphor is vital for the arousal of empathy in this scenario where the entity arousing the empathic distress is non-human. Empathy depends on the perception of similarities, real or imagined. In cases where empathy is an exchange between humans, the similarities are more immediately clear.

However, when one empathizes with an animal, there is a more advanced or imaginative cognitive process needed to establish the similarities requisite for empathy. This is where metaphor comes in. Metaphor points out the similarities between two seemingly disparate things. Once empathic distress is aroused, one might be inclined to alleviate the distress for oneself and the victim through direct aid, or conservation, both of which rely on ecology for effective execution. In this example from *A Sand County Almanac*, the interpretation Leopold initially makes through metaphor is confirmed by “mathematical analysis.” The mathematical analysis carried out, as part of ecological inquiry, is complimentary to the more subjective inquiry conducted with metaphor and empathy. This unique overlap between subjectivity and objectivity, traditionally considered irreconcilable, binary opposites, contributes to the strength of an environmental ethic grounded in metaphor and empathy.

A colorful illustration of Leopold’s employment of metaphor and empathy is provided in his reflection on the Silphium plant. For Leopold, the Silphium plant is not just a plant but also a “personality” (1949, p. 48). Leopold arrives at this conceptualization through experience. His personal anecdote recounting the first time he tried to dig up the Silphium root traces the thought process that leads Leopold to understand the Silphium metaphorically as one of many “unique totalities that can almost be read as ‘texts,’ and thus may inspire respect and love (rather than detached theorizing alone) on the part of the ecologically-aware person” (Hinchman, 1995, p. 225). The plant becomes a being in that it experiences a reality shaped by the passage of time:

How old, then, was my pet plant in the cemetery? It may have been older than the oldest tombstone, which is dated 1850. Perhaps it watched the fugitive Black Hawk retreat from the Madison lakes to the Wisconsin River, it stood on the route

of that famous march. Certainly it saw the successive funerals of the local pioneers as they retired, one by one, to their repose beneath the bluestem.
(1949, p. 49)

His close observation of the Silphium that he plants and that he sees on the side of the road creates an admiration for its hardiness. This admiration endears the plant to Leopold and causes him to lament its inevitable disappearance. In this short section, we see the importance of experiential context in creating powerful connections through metaphor and empathy. Without the observation and cultivation that Leopold engages in with the Silphium coupled with the historical context, Leopold would not be able to connect so strongly with the root. He also points to the importance of such an emotional connection when he states “The erasure of Silphium from western Dane County is no cause for grief if one knows it only as a name in a botany book.” (Leopold, 1949, p. 48) Clearly Leopold is of the opinion that scientific knowledge is not sufficient to engender a sense of moral obligation to the continued existence of these plants.

In the section titled “Thinking Like A Mountain,” Leopold illustrates an evolved form of role taking that creates feelings of empathy. The name of the section clues us in to Leopold’s conviction that even inanimate elements of nature, such as mountains, can be conceived as having cognition and consequently perspective, two things usually restricted to animate beings. Leopold reflects:

I now suspect that just as a deer herd lives in mortal fear of its wolves, so does a mountain live in mortal fear of its deer. And perhaps for better cause, for while a buck pulled down by wolves can be replaced in two or three years, a range pulled down by too many deer may fail of replacement in as many decades.
(1949, p. 132)

On the surface layer, this metaphor relates the mountain to a deer using the similar fear each has of its predator. However, implicit in the attribution of fear to the mountain is the

relation between the mountain and humans. This metaphor creates an opening for Leopold to take the perspective of the mountain. The greater empathy felt for the mountain than the deer, reflects the tendency of this metaphorically derived empathy to illuminate ecological truths, such as the greater fragility of the ecosystem that supports the deer as opposed to the deer itself.

Later in this chapter, after needlessly massacring a wolf and her cubs, Leopold has a profound moment of clarity. “I sensed that neither the wolf nor the mountain agreed with such a view” (1949, p. 132). He sees the folly in his idea that a good world is one with fewer wolves. This particular instance of perspective taking illustrates the power of an ethic grounded in empathy. Leopold is able to compare his own preexisting perspective with that of the mountain and realize the disparity. It is this realization that creates space for the transformation of one’s attitude towards the environment. With this transformation, the ability to feel oneself into the other becomes a natural and automatic process that informs an ethic in a way that is wholly unique.

Using the metaphor that the land itself is an organism, Leopold describes how much like any other living thing, the land suffers from diseases and ailments. Furthermore, human intervention into the health of this organism largely consists of “local alleviations of biotic pain” (Leopold, 1949, pp. 195-96). For Leopold this is not enough. Conservation that is driven by the ethic born of the interplay between ecology, metaphor and empathy, is the only sufficient response to this fault. This ethic acknowledges that symptoms of an unhealthy land must be looked at within the context of this metaphor that equates the land to a living organism. Where before conservation saw each failure of the land as isolated, the land ethic realizes their connections.

Conservation, according to the land ethic, becomes a means for addressing the root of the distress that the land feels, fulfilling the obligation created by empathy. If we extend Leopold's metaphor of the land as an organism, this means addressing environmental issues as systemic inflictions. Envisioning conservation through this metaphor would lead to more successful efforts.

Leopold's conservation is informed not just by biology and botany, but metaphor and empathy as well. Leopold defines conservation allegorically as "a matter of what a man thinks about while chopping, or while deciding what to chop." On his own farm, Leopold must decide whether to cut down a white pine or a birch tree. His stream of consciousness makes vivid the thought process that Leopold goes through to make this essentially ethical decision:

The pine stays green all winter, the birch punches the clock in October; do I favor the tree that, like myself, braves the winter wind? The pine will shelter a grouse but the birch will feed him; do I consider bed more important than board? The pine will ultimately bring ten dollars a thousand, the birch two dollars; have I an eye on the bank?

(1949, p. 69)

The first reason is an example of the sort of first person metaphor that reflects the roots of Leopold's empathy for the white pine that leads him to "always cut the birch to favor the pine" (1949, p. 69). Leopold understands himself via the pine and conversely the pine via himself. This metaphor and the resulting empathy create a pseudo familiarity bias in Leopold's empathic response. Assuming both the birch and pine have equal right to life, Leopold's decision to cut the birch and not the pine is a testament to the power of metaphor and empathy in dictating how we practice conservation and more generally how we treat different beings of the land.

One might worry that the net result of such metaphorically derived empathy is dangerous. It makes important conservation decisions contingent on the whims of ‘subjective’ bias. This is where ecology is a critical to tempering the metaphor and empathy. Leopold continues his analysis of the decision to keep the pine:

Under this pine will ultimately grow a trailing arbutus, an Indian pipe, a pyrola, or a twin flower, whereas under the birch a bottle gentian is about the best to be hoped for. In this pine, a pileated woodpecker will ultimately chisel out a nest; in the birch a hairy will have to suffice.

(1949, p. 69)

In light of this, Leopold’s bias is supported by the overall conservation goal of promoting biodiversity. By keeping the pine, Leopold is satisfying both his more subjective, personal bias to the pine as well as his commitment to the integrity of the biological community. He further augments his personal preference for the pines with science, as he says, “as in other love affairs, there is skill in the exercise of bias.” (1949, p.70) He identifies the effect the presence of the birch tree will have on the pine using his ecology background, noting that “If the birch stands South of the pine and is taller, it will shade the pine’s leader in the spring, and thus discourage the pine weevil from laying her eggs there.” (Leopold, 1949, p. 70) In this way conservation conducted out of empathy but augmented with sound ecology works towards “the integrity, stability, and beauty of the biotic community” (Leopold, 1949, p. 225).

Leopold extrapolates his metaphorically driven empathic perspective to the extremes when he provides the detailed lifetime of an atom. He identifies this atom as “X”:

X was pulled out and up into the world of living things. He helped build a flower, which became an acorn, which fattened a deer, which fed an Indian, all in a single year. From his berth in the Indian’s bones, X joined again in chase and flight,

feast and famine, hope and fear. He felt these things as changes in the little
chemical pushes and pulls that tug timelessly at every atom
(1949, p. 104)

Leopold understands this Carbon atom's lifetime as metaphorically similar to a human lifetime. His perspective of the atom attributes feelings of "hope and fear" to an atom. At the end of this sort of thought experiment, Leopold finds X "again in his ancient prison, the sea" (1949, p. 107). Through this perspective taking, Leopold realizes that:

An atom at large in the biota is too free to know freedom; an atom back in the sea has forgotten it. For every atom lost to the sea, the prairie pulls another out of the decaying rocks. The only certain truth is that its creatures must suck hard, live fast, and die often, lest its losses exceed its gains.
(1949, p. 107)

In this moment, Leopold's imaginative structuring of a narrative, whose drama is driven by biological processes, crystallizes his feelings of empathy to X, the atom. At the end of all of this perspective taking and empathizing, Leopold is able to glean a more general truth about the nature of life itself, which he paraphrases in the last line of the passage cited. This establishes another benefit to an environmental ethic painted with metaphor and empathy: the potential for self-growth. Leopold's realization that the lifetime of an atom is fraught with similar feelings of fear, hope and freedom, brings him to a fuller understanding of his own existence. It is also important to note that Leopold's detailed knowledge of biology that allows him to tell such a detailed narrative is critical in the efficacy of this perspective taking. It is not enough for a man to be a poet skilled at constructing metaphors. There is need in this process for a rigorous understanding of the sciences. It is through the combined effort of metaphor, empathy and scientific knowledge that Leopold is able to accomplish this astonishing extension of his empathic range.

I would like to take a moment to recognize the unpalatability of some of these points. I imagine that for many the notion that we can empathize with non-human entities is contingent on their being able to have emotional and mental states, feelings, and perspectives. For the case of animals, this is not so problematic. Marc Bekoff and Jessica Pierce (Bekoff and Pierce, 2009) offer extensive data showing that animals do in fact have emotions and even have their own moral codes that are very similar to our own. The ability to not only develop a morality but also to then use it in the judgment of actions in your community necessitates having a perspective. Without a perspective, one, animal or human, has no reference frame to provide context for the actions carried out by other members of the biotic community. The presence of a nervous system in many of these animals also means that they are sentient and can feel pain and pleasure. These attributes make empathizing with animals far less problematic.

Stepping out one layer farther, we encounter the inanimate members of the biotic community. This includes trees and other plants. While I do believe that we can in fact empathize with this community, I am not postulating that inanimate biotic entities have emotional and mental states, feelings and perspectives, as a human understands these concepts. They do not have the biological structures to support such qualities in a way perfectly analogous to humans. However, I don't think any one can deny with certainty that they do not have perspectives, perspectives that come from being dynamic beings that experience the passage of time in some way. They are also subject to the same physical forces as humans are. These forces dictate both our actions and theirs. Plants also have interests. From a Darwinian perspective, plants have an interest in perpetuating their kind. This goal drives their actions. So while plants may not have a perspective that

they can cognize or vocalize, there is a ‘plant perspective’. It can be taken through empathy, or vivid, knowledge-based imagination about another's circumstances, situation, or perspective (Nelson, 2007).

Perhaps the most controversial inclusion in our empathic range are the inanimate, abiotic parts of the environment. Leopold simply called this the land. Later environmental philosophers have used the more technical term, ‘ecosystem.’ In looking at Leopold’s writing it is clear that he believes that ecosystems have perspectives. The aforementioned “Thinking Like A Mountain” alludes to this belief. I address questions of empathy and perspective in relation to ecosystems in the following chapter.

Leopold’s empathy for the creatures on his farm comes from his realization that “men are only fellow-voyagers with fellow-creatures in the odyssey of evolution.” This overarching similarity is enough to trigger familiarity bias in Leopold’s empathic response. As he later notes “this new knowledge should have given us, by this time, a sense of kinship with fellow-creatures; a wish to live and let live” (Leopold, 1949, 109) Leopold, through his close observation and metaphorical comprehension of nature, is cognizant of this often overlooked similarity that links the non-human biotic community and man. Consequently, it is really only a change in perspective that leads to the inclusion of non-human nature in the human sphere of moral consideration. Leopold cultivates this perspective through metaphor.

Ch. 4: Situating Metaphor and Empathy in Environmental Ethics and the Resulting Implications

In anticipation of possible objections to the ideas underpinning the ethic described above, I will now try to clarify several points, all concerning the application of empathy in the ethic I advocate. Empathy is a curious and formidable phenomenon. It can lead humans to act in ways that completely elude prediction by ethical egoism. Much of how I have outlined empathy's use in environmental ethics pivots on this issue of perspective. Empathy and metaphor are fundamentally concerned with perspective, its fluidity, and the results of this fluidity. Both empathy and metaphor involve seeing and understanding things from a different perspective. But what does this notion of perspective imply? Is perspective restricted to those with the physical faculties that we traditionally associate with it? While this latter question will undoubtedly lead to some spirited conversation, I would like to leave it for now and return to the first question posed. For clarification, when I use the term "nature" in the remainder of the paper, it is as shorthand for "animals, plants, and ecosystems".

When discussing the perspective of the mountain in Leopold's *A Sand County Almanac*, I do not believe we are implying that the mountain in fact has a subjective reality it experiences and an emotional life that would culminate in what we understand as a perspective. While I cannot speak for Leopold himself, I do not think that he would be opposed to this interpretation of his words. By claiming that through metaphor and empathy we can take the perspective of the land, I do not mean to make a metaphysical claim about these things. Instead the perspective one takes in empathizing with the land will undoubtedly be a projection. Due to the impossibility of knowing nature's

perspective with any degree of certainty, the perspective one takes in empathizing is constructed from a human point of view, using human experience and expectation of what it might be like to see through nature's eyes. It is in this sense that the perspective we gain through metaphor and empathy is a projection. We project our own ideas of reality and existence on nature, which exists in an arguably different way.

With this projection arises the issue of anthropocentrism. Many environmental philosophers abhor the anthropocentric ethic for its posited negation of the intrinsic value of nature. Empathizing with nature will inherently be anthropocentric because the experiential gestalts used to construct the metaphors between oneself and nature will be limited to those of human experience. So when one does empathize with nature, it is a humanized conception of nature with which one empathizes. So it is possible that our projection is incommensurable with the reality of nature. While I do not see any satisfactory way around the anthropocentrism present in empathizing with the natural world, I do see remedy in science. Scientific inquiry can augment the metaphors and empathy we engage nature with so that they are supported by our positivist knowledge of how ecosystems function.

I also find it important to clarify where I see this ethic of metaphor and empathy situated in the broader discourse of environmental ethics. This discourse has been dominated largely by the question of value. For many, our treatment of the environment is, in theory, a direct reflection of how we value it. The treatment of the environment for much of the last several centuries suggests that nature's value, if it has any at all, is strictly instrumental. That is to say, it only has value as far as it serves a purpose that benefits humanity. Rampant resource extraction with little thought of anything but

maximizing economic returns supports this valuation of nature. However, as the species extinction rate reaches 27,000 a year (PBS, 2001), it is becoming increasingly evident that these terms of valuation will not foster a harmonious coexistence between humans and the land that we live on.

In response to such rapid degradation, many philosophers try to establish the intrinsic value of nature as grounds for its protection. The ethic I describe is not an argument for the intrinsic value of nature, although, the end result is hopefully a heightened sense of value of the natural world in the human observer. I appeal to the distinction made between value and valuer. While metaphor and empathy do not make claims about whether nature has intrinsic value, I believe that they lead to fundamental changes in the valuer's perspective on what is valuable. For me, this has a similar net effect to proving that nature has inherent value. The notion of intrinsic value will most likely always be contestable. This contestability is due in part to the fact that intrinsic value implies a metaphysical reality. When rejecting the concept of value as only existing in the presence of a valuer, those in favor of the intrinsic value argument appeal to absolute value existing stand-alone. However, the change in perspective of valuers requires no claim to objective, absolute truth of this sort and for this reason is not contestable in the same way.

While I do believe that nature has inherent value, it is not on these grounds that I offer metaphor and empathy to the world of environmental ethics. Instead I see this ethic offering a perspective through which we can relate to the environment in a way that isn't economic. Leopold's land ethic targeted this very same shift. When decisions concerning conservation and resource use are made, it is often the market that holds the fate of the

natural world in its hands. This system of valuation has changed very little since the time of Leopold. In *A Sand County Almanac*, Leopold too observes “Land-use ethics are still governed wholly by economic self-interest” (1949, p. 209). The inadequacy of this ethic lies partially in the fact that “most members of the land community have no economic value.” (Leopold, 1949, 210) It is my belief that through engaging the land through metaphor and empathy, we can gain a perspective that will inform these decisions in a manner that is consistent with Leopold’s land ethic.

There is perhaps no realm whose need for this new perspective is more critical than that of politics. It is in the political realm that decisions are made that can spell the end of ecosystems on scales that are often difficult to comprehend. Policymakers can relegate old growth forests to toilet paper with the stroke of a pen. That said, with such power, environmental legislation has had its successes as well. Most of these victories, such as the Clean Water Act, were due to the construction of the environment as a source of strictly economic value that had to be protected for anthropocentric reasons. As tools, these pieces of legislation have allowed the environmental movement to protect significant ecosystems. However, there are vast expanses of land and a large number of species that are not protected under these policies. Largely due to a perceived absence of economic value, these natural entities often suffer at the hands of the political process.

It is clear though that policy is promising and that its failures are more an issue of representation than functionality. In policy decisions that concern the land, the land cannot speak on its own behalf. This somewhat obvious fact has profound implications for the efficacy of our environmental policy, where success is measured by land set aside for conservation and species protected. According to John O’Neill, “Nature cannot speak

for itself nor represent itself. It has no voice. Nature's interest interests are spoken through human utterances. Even its silence requires human voice." (2006, p. 266) When humans speak on behalf of nature, the result is not always beneficial for the environment- but it is vital to not be hasty in giving up at this point. The fact that nature needs representation, juxtaposed with the many case studies in which our representation on behalf of nature has been a failure, should not lead us to embrace defeat. O'Neill makes the following statement underlining the need of representation:

The presence of nonhuman nature in deliberation about environmental choices requires human representation. This is not to say that nonhuman members of the natural world do not or should not count in deliberation. There is no reason to assume that those who are morally considerable should be limited to those who can deliberate. Very young children cannot deliberate; neither can sentient animals. Both ethically matter. However, they require representation by others in public deliberation.

(2006, p. 266)

Some may take issue with the invocation of hierarchies of authority present in O'Neill's analogy of nature to young children. Reading into this metaphor might lead one to the conclusion that we must discipline nature and make decisions that we see as in its best interest, just as human adults do for young children. However, for the moment any inflammation caused by this can be assuaged by the assertion that both parties are in a state of ethical parity as both adults and young children have equal value in ethical decisions and equal right to have their interests considered.

The need for representation seems to presuppose the presence of interests in the first place. I would like to take this space to address this issue. As far as the animate members of the natural community are concerned, it is not so difficult to construe of them having interests. Several arguments have been made on behalf of this premise. Some philosophers, such as Peter Singer (Singer, 1976), appeal to the quality of sentience, the

ability to feel pain, as the endower of interests. This argument hinges on the utilitarian view of pleasure and the absence of suffering as good. Therefore preventing suffering is in the interest of all sentient beings and consequently is the goal in all decisions. The fact that many animals have a nervous system makes their capacity to suffer hard to question. However, this argument cannot speak to the interests of inanimate biological entities, such as plants or even very simple organisms.

How does one then defend the notion that plants have interests that must be taken into account during the decision making process? Harley Cahen (Cahen, 2003) cites “goal directedness” as the closest thing to interests that plants have. The goal directedness of plants is not as abstract as it might seem. Trees will bend their trunks in order to position themselves more optimally for photosynthesis. Such actions can be understood as showing the plant’s interest in continued growth. As Paul Taylor puts it “ trees...have no knowledge or desires or feelings. Yet it is undoubtedly the case that trees can be harmed or benefited by our actions. We can crush their roots by running a bulldozer too close to them. We can see to it that they get adequate nourishment and moisture by fertilizing and watering the soil around them” (1981, 141). This example shows how our actions can negatively and positively affect the tree’s accomplishment of its goals. I think a hybrid of Cahen’s and Taylor’s view is possible if we see the things that work towards the realization of its goal as being in the interest of the tree, and those things that impede it as otherwise. As Taylor rightly states, “the entity itself need not have any (conscious) *interest* in what is happening to it for such judgments to be meaningful and true.” (1981, p. 148) Accepting this, it comes that inanimate members of the biotic community have

interests as far as they can be benefited (helped towards realization of their goal) or harmed (hindered in realization of their goal) by actions or objects.

Ecosystems, similarly, can be benefited or harmed. In this case, however, we need not understand ecosystems as goal-directed or as having interests in a robust metaphysical sense in order to conceive of harm and benefit to ecosystems, or to take an ecosystem perspective. Instead, we can think of ecosystems as complex systems that sustain diverse forms of life, including humans, animals, and plants. It is in the interests of these elements of ecosystems that ecosystems themselves be sustained, remaining healthy and stable. A healthy ecosystem is thus one that sustains and supports the plants, animals, and human beings that live within it. Though ecosystems themselves may not have interests in a literal sense, we can speak metaphorically of the interests of ecosystems, just as we speak metaphorically of the interests of institutions like Colorado College or political bodies. In the case of the college, its interests are tethered to the function the college has in the lives of those individuals that comprise it. For students, the college's function is to educate. For faculty and staff, the college's function is employment. This is by no means an exhaustive list but it shows that although institutions might serve a variety of functions for those within it, it maintains coherent interests. Similarly, we can take an ecosystem perspective, and speak on behalf of ecosystems, just as one might speak on behalf of a corporation or nation.

Corporations occupy a sort of liminal space in the minds of Americans. While they are abstract constructs, we are aware that they are made of real people that exist concretely. So a corporation is not completely abstract. In everyday conversation we bypass this ambiguity, having no trouble in discussing the interests of corporations as if

they were people. We are so comfortable doing this in fact that we have granted corporations personhood. I propose that we think of ecosystems in just the same way as allowed by corporate personhood. Both corporations and ecosystems are collections of individual entities. Both have interests. The one interest of a corporation is to continue to be profitable so it can serve the purpose it has in the lives of those individuals that it consists of. In the case of the ecosystem, its interests can be linked to the function of ecosystems in sustaining the individuals that it supports. If we can make use of this analogy, this metaphor that transfers our understanding of corporate personhood to our conceptualization of ecosystems, empathy with ecosystems will come with ease.

The ethic comprised of metaphor and empathy is an ethic of representation. It allows for humans to speak on behalf of nature in a way that is informed by identification and empathy with nature. This would bring a more diverse array of “environmental interests” to bear on the decision making process. In a linguistic sense, this process of representation is a process of translation. Within this analogy it is important to note that the source language is in actuality the human observation of the natural world, while the translated meaning is a human derivative from these observations. Inevitable to this point is the concern with anthropocentrism. It is true that speaking on behalf of nature will suffer dilution via the human translation. Chuck Dyke establishes the paradox succinctly:

[A]nything that nature “says” will have to be interpreted, mediated by those to whom the word primarily belongs. So the original act of exclusion will be reenacted over and over again as nature is mediated through one after another interpretive labyrinth.

(2006, p. 67)

Dyke is not very optimistic about this mediation, but Dyke himself notes that “nature must “speak” to us to establish a place in our priorities” (2006, p. 67). So the issue becomes how to best represent what nature says.

Throughout this paper, I have constructed nature as an Other, or “subaltern,” as the post colonialists would say. In post-colonial theory, the self objectifies the subaltern when the self exerts a form of domination over it. This domination can take the form of claiming to know the subaltern, in which case comprehension becomes a sort of apprehension, where by assuming one knows, in an absolute sense, something, they prohibit that something from being anything other than this particular conceptualization. Or in the case of nature, domination can take the literal form of resource extraction as well as the more figurative domination through knowledge. In this regard, the construction of nature as subaltern permits the invocation of post-colonial theory in the discussion of our relationship with nature.

The post-colonial theorist Gayatri Spivak points at a distinction that is useful in this discussion of representation. Spivak draws a clear line between representation and re-presentation, such that there exists “representation as ‘speaking for’, as in politics, and representation as ‘re-presentation’, as in art or philosophy.” (1988, p. 70) ‘Speaking for’ is for Spivak the preferable of the two. It is the more authentic of the two forms of representation and occurs when the subject speaks on behalf of itself. Re-presentation however, is a form of “epistemic violence” (Spivak, 1988) committed by the appropriation of the subject’s voice and subsequent transmutation into an instrument for perpetuating oppression. Levinas elucidates the nature of this violence when he says that

“To know amounts to grasping being out of nothing or reducing it to nothing, removing from it its alterity.” (1969, p. 44)

Within this post-colonial framework, human speech on behalf of nature runs the risk of re-presentation. In fact, it may be the case that humans, in their attempt to speak for nature can do no more than re-presentation. In both Levinas’ (1969, p. 102) descriptions of alterity and the post-colonialist notion of the subaltern, we come across the fact that the Other and the subaltern are fundamentally different in some way that cannot be transcended. So while metaphor and empathy can point out similarities to us, it is an exertion of epistemic dominance to assume that object and subject, nature and man, are the same. Linguistic theory attests to this when it rightly points out that metaphors are not coherent in any absolute sense. They are only valid within certain contexts. They cannot be extended to comprehensively encompass the entire target. Here it is implicit that knowing is the process through which one assimilates the other into the self to create sameness.

So while metaphor builds and fortifies similarities between source and target, human and nature, it “does not undo ‘distance’, does not result in the union of the knower and the known” (Levinas, 1969, p. 60) But, as one would expect, representation is not possible because nature cannot in fact speak without human translation. It seems then that this ethic arising from metaphor and empathy will always be haunted by potential epistemic violence. To contain this ghost, ecology must be used to inform our metaphors and empathy, so that our treatment of nature in response to empathy is not at the mere whims of figurative language.

Taking responsibility to speak on behalf of nature needs to be accompanied by some sort of humility. This humility should acknowledge the limits inherent in metaphor and empathy so that no one acts under the pretense of knowing nature's perspective in any absolute sense. It should also come hand in hand with a certain attentiveness that commits the observer of nature to pure intentions. That is to say, the person who takes it on to speak on behalf of nature should do so in a way that is separate from any personal agenda to avoid diluting nature's perspective any more than necessary. Ecologists cultivate this delicate attention through the close observation that is required for the development of hypotheses concerning the natural world. Through these observations, the ecologist develops humility in the face of the complexity of natural systems and his or her place within it. From a more abstract perspective, ecology helps the human observer to realize that the traditional framework that puts man above nature in both complexity and superiority is faulty. Leopold points out "the scientist...knows that the biotic mechanism is so complex that its workings may never be fully understood." (1949, p. 205) Ecological inquiry is an avenue at the end of which lies a respect for nature because of the realization that nature's existence is in no way contingent on our own, and that without us it is able to maintain a level of diversity and efficiency that is astonishing.

But is ecology enough? If one acknowledges that there are inherent epistemological limits that cannot be crossed by means of positivist inquiry, then metaphor and empathy, even when buttressed by ecology are fated to commit some degree of epistemic violence. So on what grounds can we justify the use of empathy ethically? I argue that the answer to this question differs based on two factors: one's view of human nature, and the definition of empathy one uses. I see two possible combinations

of these two factors. The first is slightly more pessimistic but no less legitimate than the second. For simplicity's sake I will call these two possibilities the egoistic and the consequentialist.

The first operates under the assumption that humans act exclusively out of self-interest. Using the definition of empathy provided by Hoffman, namely “an affective response more appropriate to another's situation than one's own” (2000, p. 4), alleviation of empathy can take the shape of self-interest. This assumes that the empathy aroused is ‘low level’. That is to say it has more in common with the newborn reactive cry scenario than the more complex and mature empathic responses. In this case, the observer has trouble distinguishing his or her own distress from that of the victim. Thus when actions are taken by the observer to alleviate empathic distress it is in their own self-interest. In the case of empathic distress evoked in an observer by nature, this egoism brings us to a place that looks suspiciously familiar to the objection based on anthropocentrism that was addressed earlier. In this case, a human observer, by acting out of their own self-interest to alleviate empathic distress, which is in reality the distress of nature, also addresses nature's ‘suffering’. Thus empathizing with nature and acting on this empathic distress is right according to the doctrine of ethical egoism. If one subscribes to this reasoning, then the role of metaphor and empathy is to make nature's suffering their own, and to treat this suffering on the basis of self-interest.

The consequentialist approach is made on the presupposition that there is such a thing as altruism. It makes use of empathy as *Einfühlung*. This definition portrays empathy less as an uncontrollable psychological phenomenon and more as “participative thinking” (Shotter, 2006). For this premise, the observer does not experience the

dissociation that the observer in the egoistic case does. They feel into the perspective and act altruistically to address the situation of nature as they see it. However, as discussed earlier, this will be anthropocentric in some degree. When compared to the alternative of non-action, this altruistic action, although anthropocentric, will lead to better representation and protection of nature. Therefore, empathy is ethical from a consequentialist perspective as the net result is good, despite the anthropocentric means.

It is my belief that these two positions represent opposite sides of the ethical spectrum, and thus by justifying empathy as ethically right on both accounts, one can comfortably accept action based on empathy with nature as ethical.

In essence, metaphor and empathy provide a working bilingual dictionary for the process of re-presentation. Like with any language, there will be nuances that cannot be translated, colloquialisms that lose their meaning in transit from one language to another. But I am optimistic that communication of nature's interests is possible through metaphor and empathy. It is through metaphor and empathy that we can project a perspective onto nature in order to understand and communicate nature's interests. With these interests, individual relations with the environment stand to become more dialectical. On a larger scale, these natural perspectives can transform environmental policy and other political decisions where the interests of nature hang in the balances. These changes in both the personal and political realms, if embraced earnestly, will aid in establishing a more just treatment of nature.

Ch. 5: Conclusion

It should not be ignored that speaking for nature engenders the possibility of letting it speak to us. This dialogue with nature that we are engaged in through metaphor and empathy is transformative. It is obvious that our presence and relations with nature change it. This basic fact looms in the background of the environmental crisis we find ourselves in. What is left out of this picture is the other dialogic aspect that through our relations with nature, we are changed. The land ethic takes us to this place where we can converse with nature in this manner. The effects of this conversation do not dissipate upon silence, but linger. They overflow from our interactions with nature into our moral lives with humans:

If we cannot understand and appreciate the land's mystery, beauty and integrity, can we ever really respect and value another person or culture? A land ethic, then, sees the enrichment of human character as at once (a) inseparable from the preservation and love of nature, and (b) promoted by the very virtues that environmental awareness develops in people.

(Hinchman, 1995, p. 249)

These parting words in Hinchman's article support a reading of Leopold's land ethic as neither anthropocentric nor ecocentric. Leopold believed that moral treatment of nature would expand our moral sentiments towards fellow humans. And if we see the land ethic as built on existing human morality, then the land ethic retains a tidal nature where our moral dispositions in human community and natural community ebb and flow into each other. Such dynamism is the pinnacle of what can be hoped for in an ever-changing world.

However for many, this dynamism is not compatible with any legitimate ethic. It is somewhat traditional for moral theory to be defended on static principles. In this tradition, ethics, in order to have validity, must take the form of a mathematical proof.

Numbers are replaced by presumed uncontested metaphysical claims, and absolute principles. Reason and rationality are paramount to an ethic's durability against philosophical critique. For many, this form is the only way in which an ethic can be considered to be true and thus binding. The land ethic, as an instantiation of metaphor-induced empathy, is not reducible to such a proof. In fact many will be quick to disregard the land ethic, as metaphor is not seen as grounded in reason or rationality. The subjective and relational nature of metaphor and empathy does not make a crutch of these abstract ideals. Instead it resituates imagination in the metaphysical discourse. In coherence with this notion, Lakoff and Johnson affirm that metaphor "unites reason and imagination" and is "thus *imaginative rationality*" (2003 p. 193) From this, it is defensible for metaphor to inform a legitimate ethical stance. As Deirdre McCloskey puts it:

To admit now that metaphor and story matter also in human reasoning does not entail becoming less rational and less reasonable, dressing in saffron robes or tuning into "New Dimensions." On the contrary it entails becoming more rational and more reasonable, because it puts more of what persuades serious people under the scrutiny of reason.

(1990, p. 6)

Following from McCloskey's words is the notion that metaphor does not commit us to any sort of questionable cognitive process. While this may be true, many who find the derivation of normative statements from metaphor deplorable will be reluctant to relinquish this notion of ethics being grounded in truth. Fortunately they do not need to. What is needed is a rigorous analysis of the concept of truth. Nietzsche provides a benchmark for such analysis. For Nietzsche truth is:

A mobile army of metaphors, metonymies, and anthropomorphisms: in short, a sum of human relations which have been subjected to poetic and rhetorical intensification, translation, and decoration and which, after they have been in use

for a long time, strike a people as firmly established, canonical, and binding
(1999)

These words provide formidable scaffolding for the metaphorical ethic and its veracity. This ossification mentioned towards the end of Nietzsche's passage should be noted, as it has been shown that much of the current discourse of knowledge, namely positivist, operates on metaphors that have long died and been petrified into the cultural corpus of acceptance. The land ethic calls for the use of a new metaphor, nature not as machine but kin. We must, however, be careful with the ossification of the new metaphors that this will entail, lest we find ourselves farther down the road at a crisis similar to the one we currently face.

Empathy has an equally valid claim to ethics, specifically environmental ethics. Empathy is fundamentally metaphorical in nature. When one empathizes, one carries over their own experiences and imagination to the other, traversing the untraversable distance between self and other (Levinas, 1969, p. 62). Because empathy is metaphorical, it receives all of the same entitlements to truth as presented above. Furthermore, empathy has an additional source of truth. Truth springs from the relation between self and Other. "Truth arises where a being separated from the other is not engulfed in him, but speaks to him." (Levinas, 1969, p. 62) Metaphor translates what the other speaks to the self. Without this translator, empathy with nature would be severely restricted to the animate biological community.

And yet empathy takes us farther than metaphor. While metaphor concerns concepts, empathy has as its subject actual entities; humans, animals, plants, members of the ecosystem. These entities literally and metaphorically have faces. Faces that speak to us. It is through this speech that we find ourselves obligated to acknowledge their

interests, while not compromising the integrity of their otherness. Such compromise would amount to committing the gravest form of epistemic violence. For this reason “The epiphany of the face is ethical.” (Levinas, 1969, p. 199) A unique relation exists then between metaphor and empathy. Empathy is fundamentally metaphorical but empathy brings metaphor into the ethical realm.

So where does all of this leave us? How are we better off operating on an ethic forged out of metaphor and empathy? Adoption of the land ethic, as it calls for metaphor and empathy, will help us realize an extension of our community instincts to include nature. Not in a way that assimilates Nature as part of the self, but in a way that maintains the integrity and alterity of nature as the Other. Through such an extension we ensure a much more promising future for the human community. Such moral treatment of nature would inform our own inter-human moral dealings, to the benefit of human rights. Furthermore it would create a space for self-transformation, as “you cannot function within the environment without changing it or being changed by it.” (Lakoff and Johnson, 2003, p. 230) Additionally, the environment stands to benefit from such an ethic. By supplementing our current scientific knowledge of the natural world with a body of relational knowledge derived from metaphor and empathy, we ensure that our personal and political relations with nature will realize the sustainable coexistence of each.

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Appendix I

Director's Statement

For my thesis, I have made a documentary film that looks at the way we relate fundamentally to the natural world. There are a couple of basic ideas underlying my work on this film. The first of these ideas is that by interacting with nature we learn about our own lives. Following this is the notion that metaphor is the tool we use to understand these lessons nature can teach us. Finally, using metaphor to interact with nature can lead us to empathize with it, which leads to ethical treatment of nature and action towards protecting it. I fully flesh out these ideas in the paper component of my thesis for the Environmental Science Program.

The film is an important and relevant part of my Environmental Science Thesis because it shows a real life instantiation of the ideas I discuss from a more theoretical standpoint. My film begins by looking at a particular man, Doug Holdread, who I saw as manifesting this relationship with the environment described in the written thesis. Doug is an educator and artist who is heavily involved in the Piñon Canyon Expansion Opposition Coalition. The PCEOC has fought the Army's expansion plan for Fort Carson for almost six years now. Doug decided to get involved in the opposition after partaking in a 'pilgrimage' up the Purgatoire River. The Purgatoire and the surrounding canyon lands are threatened by the Army's planned expansion. He embarked on the pilgrimage in an attempt to make sense of recent events that had left him feeling "unraveled" and undermined. The trip transformed his life. When news of the Army's expansion reached his ears he felt obligated to protect the land that had become a metaphor of his own life.

I have several goals I hope my film will achieve. The most important of these is the creation or reinforcement of moral obligation to the environment. A subpart of this goal includes endearing Piñon Canyon to the viewers through the narrative of Doug's struggle to protect the land that restored him. I also want the audience to participate in an empathic process with the natural landscape through the "b-roll" footage I include. The word empathy is derived from the "German *Einfühlung* – literally, feeling 'in' with another's mood." (Denham, 2000, 156). *Einfühlung* was used by the 19th century German philosopher Robert Vischer to describe the esthetic experience an observer has when looking at a piece of art. In this sense the film will be a film about a man that empathizes with nature that also encourages the audience to simultaneously empathize with the character as well as the environment.

Stylistically, I want the film to mesh the compelling narrative Doug provides with a portrayal of the land that evokes the feelings Doug presents. Aesthetically, I would like the film to make use of minimalist tendencies to establish the sparse landscape of the prairie and juxtapose it with the lush and vital image of the river that restored Doug. The tone of the narrative will be positive but urgent. I want the audience to realize that if we allow Piñon Canyon to become the world's largest live fire range, we lose more than just millions of acres. We lose something that is intangible in ourselves. More importantly, I want it to be clear that Piñon Canyon is representative of any natural place; that this ligature between man and nature is not exclusive to Doug Holdread and Piñon Canyon but to all people and all places.

Appendix II

A Sense of Mooring (Download link)

<http://www.mediafire.com/download.php?ycfpvn6025u0453>