THESIS

VALUE THEORY IN ENVIRONMENTAL ETHICS AND ECONOMICS

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ABSTRACT

VALUE THEORY IN ENVIRONMENTAL ETHICS AND ECONOMICS

The need for an environmental ethic is clear. Many in environmental ethics claim that an environmental ethic ought to be based on the intrinsic and/or non-anthropocentric value of nature, without consensus on a clear definition of those terms and without a clear analysis of the implications of adopting such an ethic. The purpose of this thesis is to first make sense of those different definitions and claims. Then, I describe Aldo Leopold's *Land Ethic*, a community-based environmental ethic outlined by Aldo Leopold, in order to contrast the different ways in which we ought to value the natural world with how we value things in economics. I argue that theories of value in economics, specifically existence value, are not compatible with nor can they capture the intrinsic, non-anthropocentric value of nature, and I propose an alternative ethic in opposition to the commodification of nature, and the relationship to the natural world formed by economics.

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VALUE THEORY IN ENVIRONMENTAL ETHICS AND ECONOMICS

PREFACE

> It is increasingly said that civilization, Western civilization at least, stands in need of a new ethic (and derivatively of a new economics) setting out people's relations to the natural environment, in Leopold's words "an ethic dealing with man's relation to land and to the animals and plants which grow upon it." (Routley 205)

With the looming climate crisis, the need for a new environmental ethic seems glaringly obvious. The evidence for climate change is undeniable and overwhelming, and yet, most of us are left without a clue of how to change or what exactly needs to happen to curb this crisis.

While environmental ethicists call for a new, environmental ethic, what does this ethic entail, and what does it mean for nature[1]? What kind of value does nature have? What is required of humans according to this new ethic? This ethic calls into question our relationship with nature and how we view nature, a relationship typically dominated by narratives from economics. Many environmental ethicists call for nature having intrinsic value, or at least value independent of humans in some way, but there are many different claims about the kinds of value nature has, and it is difficult to make sense of them. Economists have also tried to capture similar claims of intrinsic value.

Chapter one involves a discussion of the different theories of value and welfarism, and those commonly associated with nature, specifically, intrinsic value and non-anthropocentric value, in order to provide clarification for the various definitions. Chapter two involves a discussion of Aldo Leopold's pivotal work of environmental philosophy and ecology, *The Land*

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[1] In the context of this discussion, I will be discussing intrinsic value claims in terms of the value of nature. When I refer to nature, this can mean "the whole and/or its parts". Nature can also refer to the "eco-community" later in chapter two and three.

Ethic, which describes how a community-based, ethical relationship with the land, rather than an economic relationship based on the commodification of nature, is better suited to capture the value of nature, and outlines an alternative way of living according to an environmental ethic. This involves a discussion of which claims made by intrinsic value theories and non-anthropocentrism can be captured by Leopold's ideal. In chapter three, we will look at specific theories of value in economics, to see whether or not the claims made by those theories can adequately capture or be compatible with an environmental ethic based on claims of intrinsic and non-anthropocentric value. I argue that ultimately, these theories fall short and are not compatible with nor do they capture the intrinsic, non-anthropocentric value of nature.

CHAPTER ONE: THEORIES OF VALUE

1.1 Welfarism

Before discussing the value of nature, first we must discuss different theories of value. In the theory of value, *value* means *the good*. How then do we define *the good*? One theory of value, the theory of *welfarism*, defines *the good* as being *the good for*. For something to be good means it is good for someone or something. The *good for* is synonymous with well-being, welfare, and in some uses utility. I will refer to *the good for* as well-being here. There are different theories of well-being that contain different standards of what well-being consists of. These theories include (a) mental state accounts, (b) state of the world accounts, and (c) objective list accounts (Keller 84, Griffin 7). I will describe each of these accounts in turn and their advantages and disadvantages.

(a) Mental State Accounts

Mental state accounts are accounts of what well-being consists of. Mental state accounts say that well-being consists of experiencing certain positive mental states and not experiencing negative mental states. The most prominent mental state account is hedonism; hedonism says that experiencing pleasure is what is good for an individual, and experiencing pain is what is bad for an individual.

The advantage of hedonism is that it is a simple account of well-being consisting of only one thing. It applies to every being that experiences pleasure and pain. The disadvantage of hedonism is that it claims that pleasure is good for you even if you do not want it. For example, suppose a person is committed to ending the use of fossil fuels. This project requires them to sacrifice their own happiness in order to bring about change that will not occur within their own lifetime. In response, the hedonist might say that this project is not good for the person, because it does not produce enough happiness, and happiness is good for them regardless of their desire to fulfill this project. Critics of hedonism argue that the fact that a person does not desire pleasure matters to whether it is good for them. This has led some people to believe that well-being consists of the satisfaction of our desires, rather than the experience of pleasure.

(b) State of the World Accounts

(i) Actual-desire account

State of the world accounts describes well-being consisting of desire-satisfaction rather than experiencing certain mental states. These accounts include the actual-desire account and the informed-desire account. The actual-desire account explains well-being as consisting of the satisfaction of an agent's actual desires.

The advantage of the actual-desire account is that many different goods can be considered beneficial as long as an individual desires them. If it is my desire to work towards ending the use of fossil fuels and live a life without much happiness, working towards this project (and not experiencing happiness) is what will increase my well-being since it satisfies my actual desires.

The disadvantage of the actual-desire account is that actual desires can be mistaken or flawed. An individual could desire something that is seemingly not good for them. For example, I may desire to try vegan ice cream for the first time, but I am not yet aware of the fact that I am allergic to the soy milk used as a dairy substitute, and consumption of that product will lead to anaphylaxis. The actual-desire theorist would argue that fulfilling my desire to eat vegan ice cream is what makes me better off, even though fulfilling this desire is not beneficial for my health. The criticisms of this account might lead one to the conclusion that desires must somehow not be mistaken or flawed for their satisfaction to count as increasing well-being.

(ii) Informed-desire account

The informed-desire account says that well-being consists of the satisfaction of the desires that an individual would have if they were fully-informed of the relevant information or facts of the circumstances at hand and did not make any mistakes in reasoning. The informed-desire account is also sometimes referred to as the rational preference account. The advantage of the informed-desire account is that it excludes the cases of mistaken desires mentioned above. If I were fully informed of my allergy to soy, I would no longer desire to consume the vegan ice cream.

The disadvantage of the informed-desire account is that informed-desires may differ from actual-desires, and in some cases, actual desires might be thought to be better for the individual. Suppose for example, an individual decided to pursue a mathematics education in college. She chose linear equations as her focus, because she is passionate about linear equations and finds it comes much easier to her. Unbeknownst to her, if she instead focused on differential equations, a much harder discipline, she would have significantly greater success in finding high paying teaching jobs, and jobs are difficult to come by. She is familiar with differential equations, but it is much more difficult for her to grasp, and she struggles to understand the concepts. In this case, her actual desire to pursue linear equations would be more beneficial to her well-being and produce more happiness, but if she were fully informed, she would choose differential equations, because having full information would mean she is aware of the impact on her future.

(c) Objective List Accounts

Objective list accounts list specific, objective goods that constitute well-being (Parfit 499). Examples of these goods can be relationships, knowledge, or achievement. The most prominent of these accounts are the needs-account and perfectionism.

(i) Needs-account

The needs-account explains well-being as consisting of the satisfaction of needs (Griffin 42). Needs include things that humans require in order to survive and live a good life. Basic needs include the necessities for life, namely food, water, and shelter. Non-basic needs can include means to ends that we have that are not related to survival. For example, a college education is not a necessity for survival, but it might be needed for certain individuals in certain contexts to satisfy certain ends that they might have.

This account avoids the problem of mistaken desires by not deferring to the individual's (potentially mistaken) determination of his or her needs or appropriate desires. It can also include mental state accounts or state of the world accounts, as our needs might include freedom from suffering or desires being satisfied.

One disadvantage of this account is that it is not clear how to determine what should be considered a need. There are basic survival needs for living beings, but for humans, should we also include needs like education, healthcare, income, and leisure time within the list of basic or non-basic needs (Griffin 43)? It is unclear what constitutes a need versus a mere desire. There is a risk that the needs-account would collapse into a desire-based account, either actual or informed, in which case the needs account may not offer a distinct advantage over desire-based accounts.

A second disadvantage of this account involves the issue of unwanted needs. If what is good and bad for someone is not determined by the individual, then it can be the case that what is good for someone includes needs that a person does not want. But again, taking the individual into account would run the risk of collapsing the needs-account into a desire-based account.

(ii) Perfectionism

The perfectionist account explains well-being as consisting of the specific things that perfect human nature and lead to the ideal human condition (Griffin 56). A person's well-being is then a matter of how close the person gets to this ideal. The advantages of this account are similar to those of the needs account: perfectionism also avoids issues of mistaken desires as the ideal is not determined by individual desires. Perfectionism can also include mental states and states of the world, as desire satisfaction or happiness may be considered part of the ideal.

The main disadvantages of this account are similar to those of the needs account. It is not clear what exactly should be considered perfected human nature. There is reason to suspect that not all things considered to be beneficial to human nature will apply to all people, given the differences in individual values. For example, if the development of the intellect is defined as part of the ideal, it is not always the case that all individuals will find this conducive to their happiness. Perhaps it involves difficult subjects or the pursuit is not enjoyable. Additionally, an individual may not care about that particular ideal.

(d) Conclusion

Welfarism is one way of understanding what philosophers mean by "value", and according to welfarism, value is defined as what is good for individuals, and "good for" is often referred to as "well-being" or "utility". There are different accounts of well-being (mental states, state of the world, and objective list accounts), and these get us different accounts of how to increase something's well-being, or to make the thing better off, advance the thing's interests, etc (Keller 82). Welfarism says that welfare, or well-being, is the only source of value. As a result, individuals and individual well-being is the only thing that matters.

However, welfarism narrowly describes the well-being of individuals specifically, and it is not clear whether or not welfarism can describe the value of nature, because whether nature has a “well-being” or whether something can be “good for” nature is still up for debate in environmental philosophy. Some accounts might allow for non-human animals and plants to have a well-being, but it is more difficult to show how ecosystems, species, or nature as a whole (holism[2]) might have a well-being[3]. The well-being, or interests, of nature will be discussed in this thesis, but when I refer to the interests of nature, I am not making any claims about what parts of nature have interests, I mean “whatever parts of nature turn out to have interests”[4]. With this in mind, it is worth asking whether there are other understandings of value that can better capture the value of nature, and in the next section, we will look at a second way of understanding what philosophers mean by “value”, specifically related to nature: intrinsic value.

1.2 Intrinsic Value

Environmental ethics deals with the question of whether nature, or things within it, have value that is independent of human preferences, attitudes, or uses. This is sometimes referred to as “intrinsic value”[5]. Despite frequent uses of “intrinsic value” in environmental ethics, there are many different definitions and implications. The tendency to run the differing definitions together results in misconstrued versions of what has value and may not encompass what ethicists hope to capture when discussing the value of nature. In order to answer the question, “What has intrinsic value?”, first we must answer “What is intrinsic value?”. In this section, I explore the different definitions of intrinsic value, and how these definitions apply to claims about the intrinsic value of nature. The definitions of intrinsic value I will explore in this section are:

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[2] Holism, according to environmental ethics, is a view that says nature as a whole is “a primary object of moral consideration, moral respect, or inherent worth” (List 15).

[3] For critiques of holism, see Shrader-Frechette; Taylor

[4] For a full discussion of the interests of nature, see Varner.

[5] Some philosophers use “inherent worth” rather than “intrinsic value”.

(a) Intrinsic value is the value a thing has for its own sake.

(b) Intrinsic value is the value a thing has in virtue of its intrinsic properties.

(c) Intrinsic value is objective value.

(a) For its Own Sake

The first definition describes an intrinsically valuable thing as being valuable for its own sake, as opposed to being valuable for the sake of something else (O'Neill 119; McShane, "Why Environmental Ethics…", 47). There are three understandings of how something can be valuable for its own sake: moral standing, direct duties, and as an end in itself. First, for something to have value for its own sake is for the thing to have moral standing, meaning we ought to take the thing's interests into account when making decisions that may impact that thing.

One common ethical theory associated with this understanding is utilitarianism, which says that the morally right action is the action that produces the greatest good for the greatest number of individuals. The right action maximizes the welfare or interests of those impacted. The things that have moral standing are the things with interests that should be taken into account in deciding what would produce the most good.

A second ethical theory associated with this understanding is deontology. Deontology is a duty-based ethical theory, which says the morally right action is the action determined to be right in principle, based on a set of moral rules or duties. In some cases, these duties involve avoiding harm to certain things or benefitting those things. Moral standing determines those things that we have duties not to harm or duties to benefit.[6]

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[6] This understanding can also apply to virtue theory: if cruelty is a vice to be avoided, it must be determined what counts as cruelty. It does not make sense to determine a notion of cruelty without determining the interests of those impacted.

In animal ethics, as an example, it is a topic of debate as to whether or not animals have consciousness and feel pain. Some argue this is a determining factor for moral standing, so if they in fact do feel pain, then the interests of these animals should be taken into account. If cows can feel pain, for instance, then the utilitarian says that the interests of the cow should be considered before deciding to eat meat or when determining the best way to raise cattle.

In environmental ethics, if nature has intrinsic value according to this understanding, it has moral standing, meaning the interests of nature should be taken into account when deciding on policies, for instance. When deciding whether to allow drilling in the Arctic National Wildlife Refuge, policymakers should consider the interests of the ecosystem in ANWR and how the various species, communities, and populations could be harmed or benefited, assuming they can be[7].

The second understanding of how something can be valuable for its own sake says that we have direct duties *to* the intrinsically valuable thing, not just indirect duties that somehow involve it (McShane, *"*Why Environmental Ethics…", 63, citing Regan 19-20). In contrast to the first understanding, direct duties describes *what* we have duties to and *who* would be wronged if those duties are ignored, rather than merely who or what our duties *involve*. For example, if I were to lend my friend my car, she has a direct duty *to me*, the owner of the car, to take care of the car, which involves treating the car a certain way, namely avoiding an accident, keeping it clean, etc. If she were to crash the car, she would be wronging me, but she would not be wronging the car. Her duty is to me, not the car, even though it is a duty that involves her treatment of the car.

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[7] Recall from the end of the well-being section on page 7, "interests of the ecosystem" refers to whatever parts of the ecosystem may turn out to have interests, but I am not making a claim about which parts that might be.

This understanding is typically associated with deontology. Deontology, recall, is a duty-based ethical theory. In deontology, it matters whether we have duties to something or merely duties involving it. If we have a duty *to* something, then this thing has a different moral status, meaning it needs to be treated differently than something our duties merely involve.

The direct duties understanding is often, but not always, used as a basis for rights claims in ethics. These claims typically say that when we have a duty to something, then that thing has a corresponding right associated with that duty. For instance, when I have a duty not to harm animals, then as a result, those animals have a right to be free from harm from me.

In environmental ethics, this understanding is invoked to argue that nature is something we have a duty to, as opposed to the understanding that we only have a duty to the people who, for example, own property or have interests related to nature. We can in this understanding commit wrongs against nature. For example, if a forest has intrinsic value according to this understanding, then we have a duty to the forest, in contrast to the notion that we only have a duty to the owner of the plot of land. If I were to cut down a stand of trees in the forest, then the claim is that I might be wronging the forest, as opposed to solely wronging the owner of the land. If this is extended to a rights claim, then the claim is that the forest has a right to be treated in such a way that I fulfill my duties to it.

The third understanding of how something can be valuable for its own sake says that the intrinsically valuable thing is valuable as *an end in itself* rather than merely as a means to some end. This is typically referred to as "non-instrumental value". In contrast, instrumental value says that something has value if it is valuable for the sake of something else, or as a means to some other end (Korsgard 170). Typically in this understanding, an *end* is a goal or purpose, and the *means to an end* is a way to achieve that goal. For something to be *an end in itself*, the intrinsically valuable thing is valuable in its own right, meaning that the thing's value is not determined by the ability of the thing to aid in achieving a goal. The thing has value in its own right, so how useful the thing may be to others does not completely determine the thing's value.

In environmental ethics, the claim is that nature is valuable as an end in itself, so the value of nature is not determined merely by its usefulness as a means to satisfying some end, typically for humans. Oftentimes, "nature" is equated with "natural resources", and this term comes from the usefulness of nature for humans. If nature is valuable as an end itself, this equivocation does not recognize the value of nature independently of its usefulness.

(b) Intrinsically Valuable Properties

A second definition describes something as intrinsically valuable insofar as it is valuable "in virtue of its intrinsic properties", meaning its intrinsic properties are what make it valuable (O'Neill 120). Proponents of this definition aim to give a description of the types of properties that make something intrinsically valuable (McShane, "Why Environmental Ethics…", 47). Historically, this definition is closely associated with G.E. Moore. For Moore:

> To say a kind of value is 'intrinsic' means merely that the question whether a thing possesses it, and in what degree it possesses it, depends solely on the intrinsic nature of the thing in question (Moore 260).

John O'Neill offers an explanation of what Moore means by the *intrinsic nature of something*. For O'Neill, Moore's account of something's *intrinsic nature* refers to the thing's possession of *intrinsic properties*, and these properties are *non-externally relational*, or internal to the thing itself. In short, something has properties that make it the way that it is, and the intrinsic value of that thing comes from the possession of these non-externally relational, intrinsic properties.

O’Neill describes two ways of understanding what *non-externally relational,* or internal means: 1) the existence of these properties do not depend on the existence of external things, meaning the properties would still be properties of the thing even if there were no other things in existence, and 2) these properties can be “characterized without reference to other things”, meaning the characterization and description of the thing’s properties do not depend on reference to some other external thing (O’Neill 124). The non-externally relational properties of a thing are what make it intrinsically valuable, and what those properties are can differ.

For example, a plant might be valuable in virtue of having the intrinsic property of being alive; for a dog, the intrinsic property could be sentience. The sentience of the dog is not dependent on something else, meaning if other things did not exist, the dog would still be sentient. When I am describing the sentience of the dog, I can refer to the characteristics of its physiology, but I do not need to refer to something external to the dog in order to make sense of the dog’s various physiological traits.

In contrast to this intrinsic properties definition, extrinsic value is value a thing possesses in virtue of its extrinsic properties, meaning how it relates to some other thing. Such relations might include being part of a whole, being caused by something else, or being a representation of something else. In the case of the dog, if I were to compare my dog’s traits to those of my friend’s dog, the characterization of the two dogs would depend on the relation between them. For instance, if my dog is the more playful of the two, and my friend's dog is more disinterested, those descriptions depend on the comparison between the two dogs.

Examples of this claim in environmental ethics might be claims about the value of certain species in virtue of their rarity or function in the ecosystem; the extrinsic properties of a natural object could be the object’s usefulness, rarity, or scarcity, as those properties depend on the relation of the object to other objects. The usefulness of timber depends on how it is to be used by humans, and the rarity or scarcity of a tree depends on the existence or non-existence of trees like it.

So far, under this definition, something's intrinsic value is dependent on the intrinsic nature of the thing, which is its intrinsic properties. The properties discussed are internal to the thing, or non-relational, meaning they do not rely on the existence of (#1) or reference to (#2) something else. Sometimes when referencing something's *intrinsic nature*, however, it is assumed that something's intrinsic nature is equivalent to its *essence*. An essence is defined as a fundamental set of properties that make the thing what it is. This set of properties is something's *essential properties*. But *essential properties* are often falsely conflated with *internal properties* when referencing intrinsic value. Essential properties are what characterize or make the particular thing the thing that it is, and essential properties can be relational to other things, whereas internal properties are non-relational properties. However, when referencing essential properties, it is often said that something that is intrinsically valuable is valuable in virtue of its essential properties, but despite the frequent conflation of the two terms, it is not the case that *all* essential properties are intrinsic properties. For example, humans descended from the hominid family (the great apes), and this is an essential property of what makes humans what they are. To have descended from something is a relational property to the thing that humans descended from. However, the ability to speak, walk on two legs, and rationalize are intrinsic properties to humans that do not depend on the existence of or relation to other things. In sum, essential value differs from intrinsic value in an important way (McShane, "Why Environmental Ethics…", 48).

(c) Objective Value

A third definition is referred to as "objective value", which says that a thing is valuable independent of "the valuations of valuers" or in the absence of other valuers, specifically humans (O'Neill 126).[8] Within this definition, the intrinsic value of something is value that is not determined by the preferences or attitudes of any valuer. It has this value as a matter of fact, independent of any valuer's evaluations, attitudes, or preferences towards the thing or its value.

In contrast, "subjective value" is determined by the valuer's desires, attitudes, or preferences towards the thing (Dunaway 136). For example, when one says, "torturing animals is wrong", to the subjectivist this could mean "I disapprove of torturing animals", or "I find torturing animals upsetting". Objectivist theories could claim that whether or not torturing animals is wrong can be determined independently of these evaluations.

There are five different interpretations of what "independence from the valuations of valuers" means.[9] These different interpretations of independence from the valuations of valuers explain the different circumstances in which an individual or group might be wrong about whether something is valuable. To say that a thing's value is *objective* is to say that it could still have value even if:

(a) An individual or group of individuals does not think or feel it has value;

(b) An individual or group of individuals will never think or feel it has value;

(c) An individual or group of individuals would not think or feel it has value even after rational reflection;

(d) Its value is not implied through the norms an individual or group of individuals accepts;

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[8] It is a matter of debate as to whether or not other beings besides humans can be valuers, but for the purposes of this section, "valuers" is synonymous with "humans".

[9] There are other interpretations of this independence, but the five mentioned here are of the most interest to environmental ethics.

(e) It’s value is not implied through the norms an individual or group of individuals would accept after rational reflection.

In interpretation (a), the claim that something is intrinsically valuable independent from the valuations of valuers would mean that the thing would have value even if no individual or group of individuals thinks or feels it has value. In other words, something’s value is independent of whether or not someone likes the thing, expresses approval of it, desires it, or judges it to be valuable. Something’s value is independent of the approval, desires, and preferences of valuers, and its value does not depend on whether valuers like the thing or not. Theoretically, one could dislike something and therefore think it is not valuable, but it could nevertheless be valuable.

In environmental ethics, the claim in this interpretation is that the value of nature does not depend on whether an individual or group of individuals likes nature or not. An individual might think that nature is uninteresting and not aesthetically pleasing, or they might not enjoy recreating in nature, nor find any other use for it, but the claim is that nature can still be valuable, independent of that individual disliking nature. For example, a tree species can be valuable as a result of the habitat it provides, or the role it plays in the forest ecosystem, both of which are facts that are independent of individual or group preferences, or whether one likes or dislikes the tree species.

In interpretation (b), independence from the valuations of valuers can be the claim that the thing would have value even if no individual or group of individuals will ever think or feel it has value. What this means is that even if there is never a time in which an individual or a group of individuals thinks or feels it has value, the thing can still have value. The thing’s value is not determined by whether or not someone ever thinks or feels it is valuable.

In environmental ethics, the claim is that the value of nature does not depend on whether someone might eventually think or feel nature is valuable. For example, an individual might never judge a desert ecosystem to be valuable, because the complex interactions between the different organisms, and the role deserts play in providing mineral resources, are not ever known to that person or they do not recognize the importance of deserts. However, the desert ecosystem would still be valuable, because the desert's value does not depend on any individual's or group of individual's attitude toward it at any time in the past, present, or future.

In interpretation (c), the claim that something is intrinsically valuable independent from the valuations of valuers can mean that the thing would have value even if no individual or group of individuals ever thinks or feels it has value even after rational reflection. Rational reflection, in this case, can mean having full information about the thing, and not making any mistakes in reasoning. This can also be referred to as an "all things considered" interpretation, meaning if someone has obtained all the requisite facts about the thing and has considered the outcomes or potential impacts of the thing. In other words, something can still be valuable, even if a fully informed, rational individual does not think it is valuable.

In environmental ethics, the claim is that the value of nature does not depend on whether a fully informed rational individual or group of individuals would think nature is valuable. There are after all limits to human knowledge and rationality, so the value of nature, or something in nature, may not be grasped by humans, even when faced with all the information. In addition, if an individual pondered the value of nature, and taking all things into consideration, still did not find nature valuable, nature could still be valuable.

In interpretation (d), independence from the valuations of valuers can be the claim that the thing would have value even if no individual or group of individuals accepted norms that implied the thing has value. Norms are essentially generally agreed upon codes of valuation that involve how to feel, what to believe, how to act, etc.; for example, tipping the server at a restaurant, or washing your hands after leaving the bathroom. Public policy also typically reflects societal norms. In terms of value claims, even if society enacted policies or if the public generally agreed upon rules that implied something has value and should be protected or treated in a certain way, this does not fully determine whether or not the thing actually has value.

In environmental ethics, the claim in this interpretation is that the value of nature does not depend on whether societal norms imply that nature is valuable. When dealing with nature, this particularly relates to public policy. Policies aimed at protecting or preserving nature often reflect some sort of agreed upon limit on how to use or interact with nature. In this case, even if people enact policies or act in such a way that recognizes the value of nature, the value of nature is not determined by these policies or behaviors. If the norms or policies suddenly changed, the value of nature would not.

Finally, in interpretation (e), the claim that something is intrinsically valuable independent from the valuations of valuers can mean that the thing would have value even if no individual or group of individuals accepted norms after rational reflection that implied the thing has value. This is essentially a combination of interpretation (c) and (d), meaning if a fully informed, rational group of individuals lived according to norms that placed value on something, then this would not change or determine whether or not the thing actually has value.

In environmental ethics, the claim is that the value of nature not only does not depend on whether an individual or group of individuals accepts norms according to which nature is seemingly valuable, but it also does not depend on whether a fully informed individual or group of individuals would view nature as valuable. In the case of public policy, if an entire cohort of fully-informed and rational scientists, environmentalists, and conservationists got together to create the most comprehensive policy to protect nature, this would still not ultimately determine the value of nature.

(d) Conclusion

In sum, intrinsic value has many different meanings, and thus, environmental ethicists can mean many different things when they say “nature has intrinsic value”. The different definitions of intrinsic value say different things about the kind of value nature has, each with different implications. By being clear on these different definitions, we can see what environmental ethicists mean when they say that nature has intrinsic value, which will help guide our discussion in chapter two of what exactly becomes important in terms of formulating an environmental ethic.

Recall the three definitions of intrinsic value are: the value a thing has for its own sake, in virtue of something’s intrinsic properties, and the value a thing has independent of what one thinks or feels about its value. The central component for environmental ethicists when it comes to the intrinsic value of nature is a kind of independence from humans, and there are three different types of dependence that intrinsic value claims reject: the value a thing has for the sake of humans, because of a relation to humans, and because of the valuations of humans. In the next section, I will explain these different types of dependence and explain why they are problematic.

1.3 Anthropocentrism and Non-Anthropocentrism

In the previous section, I explained the different interpretations of what “independence from the valuations of valuers” means in the claim that intrinsic value is objective value. One of the important themes throughout the claims of intrinsic value involves a type of independence from humans, and in this section, we will see why “independence from humans” is important when making claims about the value of nature.

Environmental ethicists are specifically interested in the ways things have value independent from humans in particular. Non-anthropocentrism is the view that things have value independent from a relation to humans. It is contrasted with anthropocentrism, which is the view that the value of things is dependent on a relation to humans. In this section, I will explicate anthropocentrism and non-anthropocentrism, and explain the different forms of dependence in anthropocentrism and independence in non-anthropocentrism.

(a) Claims of Anthropocentrism and Non-Anthropocentrism

Anthropocentrism broadly means being human-centered, and adopting an anthropocentric viewpoint means that humans are the main focus of interest. In philosophy, anthropocentrism is a claim *about value*; it is the view that *all value* is anthropocentric value. Anthropocentric value is a *type of value*[10]. Anthropocentric value is the value a thing has in virtue of some relation to humans; for example, serving human interests, being valued by humans, aiding in the achievement of human goals, etc. The claim is that humans are the sole *source of value*. Human interests, ends/goals, and values then are the sole or main *objects of value*, meaning the only valuable things are those with some relation to humans.

Non-anthropocentrism is the opposite of anthropocentrism, specifically it is the denial of the claim that *all value* is anthropocentric value. Essentially, the claim is that some value is non-anthropocentric value. In other words, something’s value is not solely determined by its direct or indirect relation to humans (McShane “Anthropocentrism...”, 172). Non-anthropocentrism denies the claim that human interests, ends/goals, and values are the sole objects of value, meaning things that do not have a relation to humans in these ways can still be valuable (Norton 133). However, non-anthropocentrism does not deny the claim that humans can be a source of value; value can still come from humans, but humans are not the only sources of value.

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[10] Other types of value include extrinsic value, intrinsic value, instrumental value, etc.

(b) Intrinsic Value, Independence, and Dependence

Just as intrinsic value is the value a thing has independent of a relation to any other thing, non-anthropocentric value is the value a thing has independent of a relation *to humans in particular*. On the other hand, anthropocentrism about value says that humans are the only intrinsically valuable things, and that the value of non-humans is dependent on a relation to humans. And just as there are different meanings of “independent” that result in different forms of intrinsic value, there are also different meanings of “dependent” that result in different forms of anthropocentric value. These definitions of anthropocentric value parallel the definitions of intrinsic value that we have already seen: valuable for its own sake, intrinsic properties, and objective value. Anthropocentrism makes certain claims about the value of humans and non-humans. Non-anthropocentrism is the denial of these claims. In this section, I will explain the different claims that asserters of non-anthropocentrism deny, in order to show what axiological implications this may have. If we reject anthropocentrism and accept non-anthropocentrism, this will impact the value of nature, which will be important for chapter three.

(i) Valuable For Their Own Sake

One definition of anthropocentrism that the non-anthropocentrist rejects is that humans are the only intrinsically valuable things, meaning humans are the only things valuable for their own sake, and nature is only valuable for the sake of humans. Non-anthropocentrism, in contrast, denies the claim that humans are the only things valuable for their own sake. Recall from the intrinsic value definitions, there are three understandings of how something can be valuable for its own sake, and these inform three different understandings of anthropocentrism that non-anthropocentrism denies.

The first understanding claims that it is false that humans are the only things that have moral standing, and that the interests of non-humans only matter insofar as they relate to the interests of humans. To have moral standing means we ought to take the thing's interests into account when making decisions that may impact that thing. The claim with non-anthropocentrism is that it is not the case that human interests are the only interests that should be taken into account.

The second understanding claims that it is false that we only have direct duties to humans, meaning we can only have duties that involve nonhumans rather than to them. To violate these direct duties is to commit a wrong against the bearer of those duties. Thus, it is a denial of the claim that we can only commit wrongs against humans.

The third understanding claims that it is false that only humans can be ends in themselves. This means that it is not the case that only humans have value in their own right, and that all other, non-human things have value only as a means to human ends. In other words, it is denying that only humans have non-instrumental value, that all other things only have instrumental value.

(ii) Intrinsic Properties

The second definition of non-anthropocentrism says that it is false that humans are the only things that have value that does not rely on some relation to other things, and that the value of non-humans must be in virtue of some relation to humans. This can mean either that the value of non-humans does not depend on the existence of humans or that their value cannot only be described by a reference to humans.

(iii) Objective Value

Finally, the third definition of non-anthropocentrism says that it is false that humans are the only objectively valuable things, meaning humans are not the only things valuable independent of the valuations of valuers, that the value of all non-human things depends on the evaluations, attitudes, or preferences of humans. This independence can be interpreted in several different ways.

The first interpretation rejects the claim that non-humans cannot have objective value, meaning the value possessed even if no humans or group of humans thinks or feels they have value. According to non-anthropocentrism, it is not true that humans are the only things with this type of objective value, and the value of non-humans does not depend on whether anyone or any group of humans think they have value.

The next interpretations reject the claim that non-humans cannot have objective value, meaning the value possessed even if an individual or group of humans will never think or feel they have value. In other words, it is not the case that non-humans cannot have objective value, and their value is not determined by an individual or group of humans eventually thinking or feeling non-humans are valuable. The same is true even if the individuals or groups of individuals are fully-informed, rational individuals.

The final interpretations reject the claim that non-humans cannot have objective value, meaning the value possessed even if no individual or group of individuals, whether fully-informed or not, accept any norms according to which non-humans have value. According to non-anthropocentrism, whether or not individuals accept these norms, even after rational reflection, does not change the fact that non-humans can have objective value.

(c) Conclusion

There are reasons for framing the differences between anthropocentrists and non-anthropocentrists in this way. Anthropocentrists claim that all value is dependent on a relation to humans, and non-anthropocentrists reject this relation, but there are many different understandings of value that a non-anthropocentrist might accept in its place. For instance, a non-anthropocentrist might disagree with the anthropocentrist's claim that *only humans have objective value* and instead argue that *only sentient beings have objective value*. Or, a non-anthropocentrist might think that some or all non-humans do have objective value, or that nothing has objective value. In addition, a non-anthropocentrist could deny the claim that non-humans are only valuable insofar as they relate to humans and instead say that non-humans are only valuable insofar as they relate to the stability of the eco-community, for example. The point is that non-anthropocentrists can make different claims about value, some of which may include intrinsic value claims, some of which do not, so by saying that non-anthropocentrists reject certain claims of anthropocentrism, it does not commit the non-anthropocentrist to one particular alternative claim.

By rejecting anthropocentrism, environmental ethicists can make room for a holistic picture of nature according to non-anthropocentrism, in which case humans are members of an eco-community, and human values are not the only values that matter. In the next chapter, we will see what the different value claims of non-anthropocentrism and intrinsic value look like in environmental ethics, specifically according to Aldo Leopold's *Land Ethic*.

CHAPTER TWO: LEOPOLD'S *LAND ETHIC*

In the previous section, I described several answers to the questions: "What does it mean to say something has value? What is welfarism, what is intrinsic value? What is anthropocentric and non-anthropocentric value?", in order to make sense of the different value claims from different theories of value and what they mean in terms of the value of nature. With these different theories of value in mind, in this chapter, I will determine what specific ways of understanding the value of nature that might be important to environmental ethics. To do this, we will look to Aldo Leopold conception of an environmentalist worldview, as one example of the type of environmental ethic we need to capture the value of nature.

2.1 Aldo Leopold

Like many environmentalists, one of my first encounters with environmental ethics was through the various works of Aldo Leopold. Aldo Leopold is considered the father of wildlife ecology and America's wilderness areas (Leopold Foundation). He advocated for environmental conservation and societal reform long before the climate crisis took hold of the public consciousness. He was an author, philosopher, conservationist, educator, and writer that left a profound and influential mark on environmentalism and conservation.

Arguably his most famous work, though both criticized and praised, *Sand County Almanac*, describes the different types of relationships people have with nature, how different groups view and value nature and the fundamental problems with these views. Leopold further describes why we should care about nature and how we should protect, preserve, and care for it, which for Leopold, involves adopting a specific perspective or viewpoint that will lend itself to specific attitudes. He calls for adopting an ethical relationship to the natural world. This section will explain the problems with our current relationship with nature, our views towards nature, and Leopold's solution, which includes changing our views about why nature is valuable.

(a) An Ethical Relationship to the Natural World

The *Land Ethic* begins with an explanation of ethics. Leopold defines what an ethic entails:

> An ethic, ecologically, is a limitation on freedom of action in the struggle for existence. An ethic, philosophically, is a differentiation of social from anti-social conduct. These are two definitions of one thing. The thing has its origin in the tendency of interdependent individuals or groups to evolve modes of co-operation. (Leopold 238)

Ethics, for Leopold, define how things cooperate, specifically in this case, how humans and non-human beings cooperate. Ethics define what is right and what is wrong with behaviors, actions, and attitudes. Ethics involves relationships between the individual and society, exemplified by tenets of democracy, and relationships between individuals, exemplified by the Golden Rule, which says that one ought to treat others the way one likes to be treated.

What ethics currently does not involve is a relationship between humans and the natural world and, according to Leopold, this is a problem. Ethics regarding the natural world, or the land-ethic as Leopold calls it, should define what is right and what is wrong in terms of how we as humans interact with the natural world. Having a land-ethic means having a specific type of relationship with the natural world and, to Leopold, this is an essential form of ethics humans must adopt.

(b) An Economic vs. Ethical Relationship

According to Leopold, there are two types of relationships we can have with the natural world: an economic relationship, or an ethical relationship[11]. The differences between these two relationships characterize how we value the natural world. For Leopold, humans currently operate with an economic relationship. By economic relationship, Leopold understands this as a relationship between a property owner and their property, or as an owner and goods, though there are lots of ways we can think of an "economic relationship". However, according to Leopold, an ethical relationship is the best course of action for conservation, because it encourages the most morally permissible treatment of the natural world, which he bases on a community framework[12].

To describe the difference between these two types of relationships, Leopold refers to a story of Odysseus, who upon returning from Troy, hanged a dozen of his slaves that were accused of misbehaving. Slaves, at the time, were considered property, and therefore had no rights or interests that had to be taken into account. Slaves were treated however the owner wanted, because they were his property, and property has no interests. Executing the slaves was a matter of expediency, because Odysseus could not own misbehaving slaves, rather than a matter of morality, because the slaves were not worthy of respect or fair treatment. The slaveowner-slave relationship is an example of an economic relationship and shows the type of treatment typically involved. This story will be relevant again in chapter three, because one message of the Odysseus story is that in an economic relationship, something is only instrumentally valuable, and in an ethical relationship with nature, this has specific ramifications.

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[11] This dichotomy is controversial, but it is not within the scope of my project to explain or enter into this debate. Rather, I want to describe the picture Leopold paints in order to show why an ethical relationship is beneficial, why an economic relationship is flawed, and what this ethical relationship looks like.

[12] More on this below.

On the other hand, an ethical relationship would take into account the interests and treatment of the slaves. The slaves are not solely property, valuable only instrumentally, rather they are beings with interests, and for Leopold, with equal moral status. An ethical relationship not only calls into question the ownership of slaves, the practice of slavery, and the treatment of slaves, but overall, it requires that we treat our fellow humans differently than how we would treat property. It requires we treat our fellow humans as being community members with equal moral status.

Odyessus treats his slaves as though they are property; however, nowadays, it is agreed upon that humans should not be treated like property. Rather, humans should be treated ethically. This distinction between economic and ethical relationships also applies today. We still have a property-property owner relationship with things we own. There are social norms regarding how one treats their property. For example, I own a bicycle, and my bicycle is considered my property. I can use my property in whatever way best serves my interests, which can include keeping it in working condition for exercise or running errands, using it for spare parts, turning it into an art project, or even throwing it away if it's no longer useful to me. Though it may still be appropriate to have an economic relationship with my bicycle and treat it as property, this is not the type of relationship I should have with my friend or neighbor, nor how I should treat them. For Leopold, our relationship to the land should be an ethical relationship, rather than an economic one, which means the land should not be treated as property, similar to the change in treatment of humans.

The Odysseus example additionally shows an obvious difference in how we view the land in these relationships: an economic relationship views the land as "entailing privileges", meaning we have a right to engage with or use the natural world to our own advantage. In other words, the land is something to be owned that provides us with resources for use and consumption. An ethical relationship, on the other hand, views the land as something having rights or interests and is something we have an obligation to in terms of what we do that may impact the land (Leopold 238).

There is also a difference in how we value the land: an economic relationship values the natural world instrumentally. If we view the natural world as property, and we view the resources as commodities, we value the land in terms of how useful it may be in serving our interests. Decisions regarding the use of the natural world are considered decisions of expediency, meaning these decisions are based upon making the most efficient or wisest use of our resources, and in most cases, this means the most efficient or wisest use for humans. In contrast, an ethical relationship rejects instrumentalism and anthropocentrism, and could include valuing the natural world intrinsically. This may include extending moral considerability to the land, taking the interests of the land into account, having duties to the land, etc. Ethical decisions are considered decisions of propriety, meaning deciding upon what is good, bad, right, or wrong; in other words, what is immoral or moral.

In order to protect, preserve, and care for the natural world, Leopold argues we need an ethical relationship. The habits, attitudes, and policies that come about as a result of having an ethical relationship allows for the conservation of the natural world, which best allows for the existence and survival of the ecological community, another important component of Leopold's framework. Having an ethical relationship, rather than an economic relationship, requires a shift in viewpoints.

2.2 A-B Cleavage

In The Land Ethic, Leopold first defines what "land" or nature is. Leopold argues for a holistic definition of the land and, to Leopold, this means the land is essentially a community, formed by "all parts of the Earth", meaning the soils, waters, plants, animals, and humans (Leopold 239). He then describes the two views of conservationists regarding nature (or the land) in order to highlight the differences between an economic relationship and an ethical relationship and to show why an ethical relationship is important[13]: the first group, (A), has an economic relationship, and "regards the land as soil". They view the function of the land as commodity-production for human use; the land is a source of resources that should be extracted, developed, bought, and sold (Cafaro 5). The second group, (B), has an ethical relationship, and "regards the land as biota". They view the land as a community, with different elements and members, and its function is not limited to commodity-production (Leopold 258-259). This distinction between the two groups is called the "A-B Cleavage". There are several differences in both the viewpoints and values of these two groups with important ramifications in terms of how to live with an ethical relationship.

One of the main differences between group (A) and group (B) is their reasons for caring about nature and the environment. Leopold uses forestry as an example to show the different reasons the two groups care about nature and how they care for it. The foresters in group (A) "grow trees like cabbages, with cellulose as the basic forest commodity", meaning the reason foresters plant trees is solely for commodity production (Leopold 239). The foresters create artificial forests, meaning forests specifically planted for agricultural use, in order to create economic gain by extracting the resources provided by the forest. The foresters in group (B), on the other hand, plant trees in order to help maintain and manage natural environments. The foresters manage natural forests, rather than create artificial forests, in order to maintain the conditions that allow the forest and the inhabitants of the forest to thrive.

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[13] As with the dichotomy between economic and ethical relationships, it is not the case that these two viewpoints of conservations are the *only* viewpoints. However, for Leopold, these are the only two viewpoints that are important. For my project, my goal is to describe Leopold's framework, and his framework only includes these two viewpoints.

The second difference between group (A) and group (B) is their motivations behind environmental conservation, protection, and preservation. For the conservationists in group (A), the goal of conservation efforts and/or policies is to protect environmental resources so as to not lose any economic benefits. For the conservationists in group (B), the goal is to preserve nature, so as to respect the eco-community and all beings in the community's right to survival and existence. As Leopold explains, the cleavage boils down to group (A) viewing the land as a servant, to human interests, and group (B) viewing the land as a collective organism (261).

The third difference between group (A) and group (B) is the different ways in which humans in group (A) and group (B) value nature. Humans in group (A) value nature instrumentally. In other words, nature is an instrument to serve the interests of humans, and nature is only valuable if it serves the interests of humans. Therefore, human interests take precedence over the interests of nature. Humans in group (B) may value nature instrumentally, but they also value nature *intrinsically*. As we have seen, to value nature intrinsically can mean several different things; it may mean that nature is valuable for its own sake, is objectively valuable, or possesses intrinsically valuable properties, and I will discuss below which of these meanings might best capture the attitudes in group (B).

The fourth difference between group (A) and group (B) is the role of humans in regards to nature. The role of humans in group (A) is to manage the forest in order to extract what is useful *from* the forest, whereas the role of humans in group (B) is to manage the forest in order to maintain the natural ecosystem with respect to what is best *for* the forest. In group (A), humans see the forest as a source of resources, and they want something from the forest in order to satisfy human interests. Humans view the forest as having something they can benefit or gain from. Any change, modification, or damage to the forest as a result is merely necessary consequences. In group (B), humans only want to maintain what is best for the forest. Group (B) views the forest as an ecosystem or entity capable of being harmed and worthy of respect.

2.3 The Land Ethic

For Leopold, in order to have an *ethical relationship* with nature, rather than an economic relationship, there must be a shift from the viewpoint of group (A) to the viewpoint of group (B): "a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it" (Leopold 240). What this entails is a shift to a perspective that is non-anthropocentric and includes both individual members and the collective eco-community (Nelson 35). This shift forces a change in and recognition of *who* and *what* is valuable in addition to *how* we view nature, in order to forge a new relationship with the natural world. Rather than viewing nature as a commodity or resource, we should be viewing nature as a community, in which we are members.

Modern environmentalists tend to agree with Leopold's approach. For instance, the Gaia Foundation, a U.K. based organization, aims to create "a new era in which humans are living in a respectful, just and mutually enhancing relationship with the Earth, with all her life forms and with each other", which is in essence the same viewpoint of the community model (Gaia Foundation Vision). Their "new era" is based on "restoring a respectful relationship with Earth". In a similar vein to Leopold, their goal involves a shift to a collective consciousness which recognizes the importance of the rights of nature and the community ethic.

(a) Members and Citizens of the Biotic Community

The Land Ethic centers on one main premise: humans are members of an eco-community. As members of the eco-community, humans must cooperate with other members, rather than compete for existence and resources (Leopold 239). As a result, there is a kind of community mindedness that individuals must adopt, which entails certain attitudes.

In order to better understand what a community is, and what it means to be a member of a community, think of a human community, for example, New York City. Say you live in New York City. If someone asked you to describe New York City, how would you describe it? Is it solely composed of living things, specifically the residents? Or is it solely composed of the buildings, or the geographic location? No, you would likely describe it as a combination of living and non-living things. There are both biotic and abiotic elements. There is both a physical structure and a biological structure. The biological structure can include human communities and non-human communities consisting of the various non-human species that live there, and the physical structure can include a built environment of parks and museums, as well as a geographic element of where it is situated in regards to the rivers and other towns, etc. All of these things combined are what make New York City what it is and also what differentiates it from other cities.

However, New York City is not just a collection of all of these different elements. If New York City were "picked up" and moved to the current location of Boston, New York City would not be the same. It may still be New York City, but with different properties, for instance, the geographic elements would not be the same. Now think of one specific component of New York City, say the Empire State Building. Would New York City be the same without the Empire State Building? Or without Mayor Bill de Blasio? If one person leaves, is it still New York City? Yes, it would still be New York City, but again with different properties. Now if all of the buildings were removed, or all of the people left, there would be some point in which it ceases to be New York City. For example, if all the citizens of New York City moved to Philadelphia, and all the buildings were demolished, it would no longer be New York City.

It is worth noting there are long debates in philosophy regarding identity conditions that involve these very questions. Though these questions are important, it is not within my project to answer them here. Rather, the point I am trying to make is that intuitively, we can think about a community like New York City as a combination of elements and members, and there may be a point at which something that functions as a community changes or ceases to be altogether. The same can be said for ecological communities. If you lose an individual member of an eco-community or a particular species, there is a change that occurs, but the community still exists. There may be a new functional role that needs to be filled by some other member or species. However, if many changes occur, say if 99% of the species become extinct, the community ceases to exist.

What this example serves to show is that a community is composed of different elements, and members, each with different roles, and these elements function together in order to help sustain the community and allow it to flourish. A community also involves cooperation amongst the various living and non-living members, because these members are interdependent[14]. Interdependence is a matter of cooperation, for Leopold, so the members must work together and cooperate in order to sustain the community. Cooperation involves not only thinking about one's own interests, but also thinking about the interests of the other members. The community therefore needs to be structured in such a way that serves the interests of all members, and this requires treating the fellow members in certain ways.

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[14] The language of "cooperation" is mostly in reference to humans and human actions. For non-humans, it is not clear what "cooperation" means or looks like, but this is based on the claim that humans act differently than non-humans, specifically in ways that undermine cooperation or the "stability, integrity, and beauty" of the community.

Ecological communities run parallel to human communities in their overall structure and functionality. There are both biotic and abiotic elements, and they are composed of both living and non-living things. There is a physical and biological structure. There are living things, or members/citizens that relate to one another. These members have different roles, and they must cooperate with one another in order to survive and to maintain the community.

2.4 Formulating an Ethical Relationship, Treatment of Our Fellow Members

If humans recognize their membership in the eco-community, and as a result recognize the need for cooperation amongst their fellow members, this requires humans adopting different attitudes towards the eco-community and the other members of the eco-community, because an ethical relationship with the land requires changes in attitudes in order to foster cooperation. So what are the sorts of attitudes that humans should adopt towards other non-human beings within the biotic community?

The attitudes that should be adopted are those of group (B), because these attitudes encourage cooperation amongst the members of the community, and cooperation is an essential component of having an ethical relationship. In other words, humans need to adopt an ethical, community-based relationship and act in such a way that preserves and protects the eco-community, rather than viewing the other community members as property or commodities. As I will argue below, the attitudes towards other community members fostered by group (B), as well as how we should treat the other members, in the name of cooperation are those that respect each members' intrinsic value and non-anthropocentric value.

(a) Welfarism

Before moving into intrinsic value and non-anthropocentrism, the first topic to discuss is whether Leopold's ethic is consistent with welfarism and the theories of welfare discussed in chapter one. Leopold often talks as if the members of the community have a welfare and therefore matter morally. At times, it also sounds as if the community itself has a welfare, which is essentially the view of holism, but this is difficult to argue for. There are long debates in environmental ethics about holism versus individualism, and I do not intend to enter into this debate here. While this debate is important, it is not within the confines of my project to argue for one particular stance. Rather, in mentioning or gesturing at holism throughout Leopold, I aim to describe things from a neutral stance.

However, it is worth mentioning that where one falls in the holism versus individualism debate could impact or matter to Leopold's picture. The claims I am making in developing Leopold are going to look different depending upon which side of the debate one accepts. Leopold often talks about the community, as a whole, but he also references individuals and individual well-being. Though he does not specifically endorse or develop one particular side of this debate, it can be inferred that Leopold cares about individuals intrinsically, and also insofar as they contribute to the integrity, stability, and health of the eco-community, so both individualism and holism are represented. However, it is not clear whether individualism and holism can coexist. If we accept holism, then we can develop an account of the welfare of the community. If we accept individualism, then we can put aside the discussion of the eco-community as a whole, and instead focus on the moral standing of individual members, the direct duties we have to the individual members, and the objective value of the members. Overall, I will refer to the eco-community throughout this text, because this is what represents Leopold's ethic, but this eco-community for Leopold includes both human and non-human members.

As noted in chapter one, it is not clear whether nature, or an eco-community, has a welfare, well-being, or interests. Whether to accept welfarism in this context depends on whether we can attribute a welfare to the individual community members and/or of particular importance for holism, the community itself. This depends which theory of welfare one accepts.

The first theory of welfare was the mental states account, which says welfare consists of experiencing positive mental states. An eco-community does not experience pleasure and pain, nor does it have preferences, so the mental states accounts are inconsistent with this picture. The second theory of welfare was the state of the world accounts, which says welfare consists of desire-satisfaction. Again, an eco-community does not have desires, so this theory of welfare is inconsistent.

The third and final theory of welfare was the objective list accounts, which says that welfare consists of objective goods, including the satisfaction of needs and things that perfect human nature. It is possible to compile a list of objective goods for an eco-community, though this is not an undertaking I am able to take on here. Though this third theory of welfare is compatible, the overarching message is that welfarism is not required for Leopold, as claims of intrinsic value can better capture the type of holism Leopold is after.

(b) Intrinsic Value and Non-Anthropocentric Value

Intrinsic value and non-anthropocentric value are the two relevant value categories throughout *The Land Ethic*. As we saw, there are different definitions of intrinsic value that say different things about the value of nature. These definitions include having value for its own sake, intrinsic properties, and objective value. The different intrinsic value definitions also parallel different claims of anthropocentrists that non-anthropocentrists deny, specifically, that it is false that humans are the only intrinsically valuable things, the only objectively valuable things, and the only things valuable in virtue of their intrinsic properties.

One thing you will notice is that there is a sense in which intrinsic value claims are a stronger version of the non-anthropocentric value claims. While the non-anthropocentrist rejects a dependence *on humans in particular* (weak claim), intrinsic value claims reject a dependence *on anything* (strong claim). By accepting intrinsic value claims, one automatically accepts non-anthropocentric value claims, but not vice versa. With these categories in mind, in conjunction with Leopold's community ethic model, we can decide whether Leopold needs the stronger, intrinsic value claim, or just the weaker, non-anthropocentric value claim, and we can see which claims Leopold is committed to applying to the value of nature and how the attitudes to adopt should reflect these claims.

(c) Strong and Weak Claims

One of the main issues Leopold has with the economic relationship humans typically have with the land comes down to an anthropocentric perspective, specifically Leopold denies that the value of the community members is determined by some relation to humans, whether that be human ends, interests, goals, etc. In addition, while Leopold does not explicitly advocate for intrinsic value, there are components of his community ethic that entail a strong claim of intrinsic value, which is what I will describe below.

As noted in the previous section, being intrinsically valuable can mean many different things, which can result in many different types of attitudes or ways in which to view the eco-community. These types of value include being valuable for its own sake, being valuable in virtue of its intrinsic properties, and having objective value. These definitions help to explain how we should regard the non-human members of the eco-community.

(i) Valuable for Their Own Sake

The first definition of intrinsic value is the value a thing has for its own sake, and "for its own sake" can be understood as having value in three different ways: moral standing, direct duties, and as an end in itself. In the first understanding of being valuable for its own sake, this means the members have moral standing, and we should take the interests of the other members into account when making decisions or acting in such a way that could impact the other members. This seems to be what Leopold has in mind with the Land Ethic; conservationists should consider the interests of the members of the eco-community and the eco-community as a whole when making decisions that impact the eco-community.

For example, I live adjacent to and own the land in which there is a forest eco-community, which includes a creek, various tree species, birds, deer, numerous insects, bears, trout, etc. What I do can impact the forest eco-community. Say I decide to build a bridge over the creek, so I can easily cross the creek to pick mushrooms, which I previously could not do. Before moving forward, according to Leopold, I should first consider the interests of the other members of the community, both human and non-human, and how my actions might impact the other members of the forest eco-community. So if the mushrooms I pick provide food for one or various species, for instance, and these species would be harmed by losing access to a valuable food source, then perhaps I should not pick them freely. In addition, the bridge could cut off vital sunlight to plant species along the river, which would kill the plants. In both cases, I would be taking away vital resources to other species, and this should matter when I am deciding whether to build the bridge.

If the other members of the community did not have moral standing, whether to build the bridge or pick the mushrooms would not be a question of right or wrong, or how it impacts my fellow members; it would only be a question of expediency, as was the case in Leopold's example of Odysseus hanging the slave girls that he suspected of misbehaving (Leopold 237). Since I own the land, whatever mushrooms grow on the land are my property, like the slave girls, therefore I can treat them however I desire, because neither the interests of the mushrooms nor the interests of the other community members matter. In contrast, if the other members of the community, or slave girls, have moral standing, then their interests matter and should be taken into consideration.

With this in mind, Leopold is committed to a strong claim of intrinsic value when it comes to moral standing. Not only does Leopold seem to argue for the weak non-anthropocentric claim, that it is false that *only humans* have moral standing, but he also seems to argue for the stronger claim, that all members of the eco-community have moral standing. Leopold would not want to argue that only certain members have moral standing in addition to humans, or that no members have moral standing. Rather, all members of the eco-community have moral standing, because all members have interests, and a certain type of treatment matters to the members. In this case, by accepting the strong sense of intrinsic value, the community ethic calls for humans to act in such a way that recognizes the moral standing of all members, so when humans do things that could impact the other members, we should consider their interests, rather than acting solely out of our own human interests.

In the second understanding of being valuable for its own sake, we have direct duties to the other members of the eco-community, rather than duties that somehow involve them. Recall, in the case of nature, this understanding argues that we have duties to nature, not just to the property owners. This understanding recognizes that the members of the eco-community have equal moral standing, equal in the sense that each member has interests, and we have duties to the other members to respect these interests. Each member can be wronged by our failure to fulfil these duties. These duties might vary from member to member, but there is a kind of equality that comes from the fact that we have duties to them. As a result, having equal moral standing elevates the other members in the sense that the other members deserve some level of fair treatment in line with their interests and the duties we have towards them.

In human communities, we think of ourselves as having duties to the other members of a community that help outline how to treat the other members. If I witness someone rob a convenience store, I have a duty to call the police and report the robbery to protect my fellow members. To Leopold, the same can be said for other, non-human members of the eco-community. If someone trespassed on the land that I own and illegally hunted and killed multiple deer, not only was I the property owner wronged, but the deer were also wronged, because the trespasser had duties to the deer, and these duties could involve not harming it, or not invading their territory.

The stronger claim would be that we have direct duties to *all* members, human and non-humans. On the other hand, the weaker claim does not take a stance as to which members of the community we have direct duties to, rather just that it is false that we *only* have direct duties to our fellow humans. This weaker claim seems to be what Leopold is committed to. Leopold could say that we have direct duties to individuals, or the community as a whole, or he could say we do not owe duties to anyone or anything, but for Leopold, it is not necessary to argue for the strong claimer and act as if we have direct duties to all members of the community.

The third understanding of how the eco-community members have value for their own sake means that the members are an *end in itself*, as opposed to merely as a means to some other end. In this understanding, the value of the members of the eco-community does not depend on their usefulness to others. In human communities, when it comes to my family, for example, I do not only care for my family insofar as they contribute to my own benefit or for what they do for me. I care for them, because I respect that they each have their own purposes and goals in life. For Leopold, this should be extended to other members of the community, in order to maintain the community. The way Leopold wants us to treat the other members is by recognizing the fact that the other members are valuable and have their own goals, purposes, etc.

Whether Leopold is committed to the strong claim in this understanding is more complicated. Leopold is clearly committed to the weak claim: Leopold does not want to say that all non-human members of the community are only valuable instrumentally, meaning their value is only determined by their usefulness to the human members. Leopold is committed to the claim that the value of the non-human members is not solely about their usefulness for humans in particular, but it is not clear whether or not he needs the stronger claim that all members have value non-instrumentally. This is because it is possible that Leopold thought the members of the community were valuable insofar as they enhance the stability, integrity, and beauty of the community, so the members are instrumental for the sake of the community (Leopold 262).

But on the other hand, in other places outside of the *Land Ethic*, Leopold seems to care about the members individually, in the sense that there are clearly things that are both good and bad for them in their own right, regardless of whether they contribute to the good of the community, but there is little to support his need for the strong claim based on these few claims. In sum, the strong claim, for Leopold, is complex, but it is not necessary for his overall picture of the community. Of particular importance to Leopold is the weak claim, that the other community members are not valuable *solely* for the sake of humans.

(ii) Intrinsic Properties

The second definition of “intrinsically valuable” was being valuable in virtue of its intrinsic properties. These properties are non-relational, so they do not depend on something else. It is not exactly clear that this understanding is what Leopold had in mind, nor that he even needs this. In this understanding, the weak claim would be the claim that it is false that non-human members are valuable only in virtue of relational properties to humans. Clearly Leopold is committed to this, because as we have seen so far, he wants to remove humans from the center of all value, which for the weak claim, this would mean that a relation to humans is not what makes something valuable.

It is again not clear whether Leopold is committed to the strong claim of intrinsic properties. The strong claim would be that the value of all non-human members is non-relational to all things. Even though the non-human members of the community are not valuable solely in virtue of some relation to humans, for Leopold, there seems to be a relation to something that does matter in the community ethic. The question is whether Leopold considers *all the value* of the non-human members to be relational to something else, and at times, it certainly seems as if this is what he is after. Leopold’s community ethic centers on a holistic conception of the community, meaning the members of the community depend on one another in order to maintain the community. So to Leopold, it seems as if the community is all that matters. With this in mind, it is possible Leopold views all value as being relational, and this could mean that the value of the members comes from a relation to the interconnected web of members that is part of what makes the community what it is.

Essentially, Leopold does not want to commit to the strong claim, because there are reasons to think he saw all value as being relational to the community. He is committed to the weak claim, that it is false that all value depends on a relation to humans. However, given the lack of clarity from his arguments related to this understanding, the weak claim is better captured by the strong claims of moral standing, so Leopold does not need the intrinsic properties definition to account for the relations to the community that matter in his holistic, community ethic.

(iii) Objective Value

Finally, the third definition of “intrinsically valuable” is objective value. Recall that being objectively valuable means a thing’s value is independent of the evaluations, preferences, or attitudes of valuers, and this independence can mean several different things. For Leopold and the community framework, the interpretation of objectivity that seems to matter is the claim that the other members of the community would still have value even if no individual members or groups of members think or feel they have value, and even if they did not accept norms that implied the thing has value (interpretation (b) and (d)).

Leopold would accept the weak claim of non-anthropocentrism, which says that value of the community members does not depend on what *humans* think or feel about them, or what humans are committed to thinking or feeling based on socially accepted norms. This does not mean we should not adopt such norms, but that the value of the other members is not contingent on these norms or the ways members act in accordance with the adoption of these norms. However, even if humans do think they are valuable, it is not enough to merely think something is valuable, we must also treat them as though they are valuable, because if we did not change how we treat the other members, as we saw, actions matter, and the community would be unstable or fall apart. For example, even if I think the forest next to my house is valuable, if I do not also treat it as being valuable, I may still decide to clearcut the forest in order to build a garden or expand my backyard. Merely thinking something has value and not treating something as though it is valuable may not always result in actions that are actually good for that thing.

The strong claim would say that the value of the community members does not depend on what *any valuer* thinks or feels, or what any valuer is committed to thinking or feeling. It is not clear whether Leopold is committed to this claim, because this depends on how he determines which members can be valuers, and that is a metaphysical issue he does not address[15]. My focus is on what is required in order to think of ourselves as members of a community, and while we could debate his metaphysics, it is not crucial for the overall goal of his community ethic and my project. What is crucial to Leopold is the claim that the value of the members of the community does not depend on what *humans think or feel about them*.

(d) Conclusion

Based on an interpretation of the *Land Ethic*, we have gone through to see what claims would be the most and least important to capture in order to carry out Leopold's community ethic. In sum, for Leopold, we need to think of the non-human members of the eco-community has having moral standing, with interests that ought to be taken into consideration (strong claim); that we have direct duties to all members of the eco-community, not just the human members (weak claim); that the non-human members are not valuable solely as a means to human ends (weak claim); that the value of the non-humans members do not depend on properties relating to humans (weak claim); and finally, that the value of the non-human members of the eco-community do not depend on what humans think or feel about them (weak claim). Again, the difference between weak and strong claims is the difference between non-anthropocentric value and intrinsic value claims, in terms of rejecting a relation to humans in particular or to anything at all.

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[15] For further debate on this, see Chapter 3 of Rolston.

Many environmental ethicists work through the various claims about the value of nature, but in Leopold's community ethic, he provides a way of carrying out these claims in an effective and practical manner to better capture the value of nature in our everyday lives and policies. This is why Leopold is both important and relevant; the practical upshot of his community ethic is that by adopting this ethic, we can better facilitate an environmental ethic. Leopold's specific community model is based on an ethical relationship to the land, and this is something that should be applied to the natural world, rather than solely to human communities.

So far, we have seen the different claims of intrinsic value and non-anthropocentrism, and how they are associated with Leopold's community ethic. In this community ethic, the community members have value, but additionally, for Leopold, nature has value. These are the claims Leopold and environmental ethicists want to capture, and now we have a clear understanding of what kind of value nature has and what kind of value nature does not have, according to Leopold.[16]

We have also seen how an economic relationship, one between a property owner and property, is problematic and inconsistent with Leopold's community ethic. The reason this discussion of property-property owner is relevant will become more clear, but this introduces the notion of how value theory in economics views and values nature, which is purely as a commodity and will be treated as such.

Now that we have a clearer picture of what a theory of value looks like for Leopold, and how we should view the natural world, in the next chapter, we will turn to more contemporary theories of value in economics that attempt to capture some of the claims described by Leopold. These theories include existence value and non-use value. Can these theories of value capture what Leopold is after, do they even come close? What is missing from these theories? These are the types of questions we turn to in chapter three. The goal is to analyze whether the commodification of nature prevents us from adopting Leopold's community ethic.

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[16] This will inform the next discussion as to how different value claims in economics do or do not capture the value of nature.

CHAPTER THREE: THEORIES OF VALUE IN ECONOMICS

Environmental values are on a growing edge toward things once taken for granted, naively appreciated, or unappreciated. Not until developers threatened the mountain on the skyline did we realize what it meant to us, and in noneconomic terms. Not until they proposed to drain the marsh could we say that we would rather have it left alone, and even now it is difficult to articulate why. We never miss the water until the well runs dry. We learn what is at stake only when we learn what it *is* at stake. We awaken to goods when their opposites threaten, or to inconsistencies in our own value sets when we cannot have our cake and eat it too. -Holmes Rolston III (287)

Recall from chapter two, Leopold describes the economic relationship humans have with the natural world. In an economic relationship, humans have a property-property owner relationship, which entails valuing the natural world instrumentally and viewing the natural world as granting humans with certain privileges that means we can use the natural world to our own advantage for use and consumption.

In an economic relationship, nature[17] is viewed as a commodity, which entails certain kinds of treatment. In chapter two, we went through the differences between viewing nature as a commodity versus viewing nature as intrinsically valuable. Viewing nature as a commodity means viewing the function of the land as commodity-production for human use, to be utilized in the most efficient way in order to serve human interests. This results in a specific way of caring about nature, specific reasons for preserving nature, and specific ways of valuing nature. Leopold argues that viewing nature as intrinsically, non-anthropocentrically valuable entails the most morally permissible treatment, in terms of the eco-community model.

3.1 Economic Value Theory

Though we have focused so far on theories of value within philosophy and specifically environmental ethics, there are also theories of value within economics that attempt to capture the different claims of the value of nature made by environmental ethicists and Leopold. The main theory of value of interest is *existence value*, which is a type of *non-use value*. The theories of value in economics describe nature as a commodity, otherwise known as "ecosystem services". In this chapter, I will provide an overview of the different theories of value in economics, and a more in-depth description of existence value, in order to show whether treating nature as a commodity is good for nature, and whether the claims made in economic value theory can capture Leopold's eco-community model.

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[17] Recall nature can mean "the whole and/or its parts", and "nature" and "eco-community" are used interchangeably throughout this chapter.

(a) Ecosystem Services

According to philosophical theories of value, value is defined as *the good*. Welfarism, one theory of value, defines *the good* as *the good for*. Economics defines *the good* as *the good for human welfare*, and what is good for human welfare is a matter of the satisfaction of human preferences (Bockstael, et al. 1385). The value of nature, then, is determined by the ability of nature to increase human well-being. In contrast, according to some environmental philosophers, and Aldo Leopold, "the land" or "nature" is intrinsically, non-anthropocentrically valuable, and what is *good for* the land entails certain kinds of treatment, described at the end of chapter two.

In economics, the "land" is referred to as "ecosystem goods and services" or "natural resources", and the land is instrumentally valuable to "contributing to the welfare of people and society" (Costanza, et al. 254). "Ecosystem goods and services" are essentially the benefits humans derive from ecosystems to increase or produce human well-being (Fisher et al, 2051). Ecosystem goods and services include "provisioning services, such as food, water, timber, and fiber; regulating services, such as the regulation of climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services, such as soil formation, photosynthesis, and nutrient cycling" (MEA 2005)[18]. The use of the term "ecosystem services" is an attempt by economists to quantify the value of nature and monetize the natural world, in order to input this information into a cost-benefit analysis, which will be discussed below (Davidson 171, McCauley 27).

In economics, what environmental ethicists would call the "value of the land" is instead referred to as the "worth, merit, or desirability of environmental conditions and services". "So the economic value of an ecosystem function or service relates only to the contribution it makes to human welfare", where human welfare is based on individual preferences (Bockstael, et al. 1385). In other words, the value of ecosystem goods and services is determined by the benefit they provide to humans, based on human preferences.

(b) Ecological Benefits

There are different types of ecological benefits, meaning the benefits people get from ecosystem goods and services. These are 1) market, and 2) non-market benefits. Market benefits (1) are the benefits produced by goods that are bought and sold in markets and are measured by market behavior. Ecologically, this means the ecosystem goods and services that are turned into products that can be bought or sold, which involves the commodification of the natural world; for example, building materials (timber), food and water (commercial fish and livestock, drinking water), clothing (leather, cotton), etc. Market benefits reveal the preferences and values of consumers, because it is a direct representation of what humans want or need. The value of market benefits is revealed through the exchange of money, and the value of these benefits to the consumer determines the price (Munns and Rea 332). But this price also takes the scarcity and cost of the good into account. For goods that are less scarce, the price will be lower, even though it may be valuable. For example, water is essential to human life, yet the price is low, because there is a seemingly large amount of water in the world.

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[18] For a full list of ecosystem services and functions, see Costanza, et al. page 254, Table 1.

Non-market benefits (2) are the benefits produced by goods that are not bought and sold and are not measured directly by market behavior. These include most ecosystems goods and services, because most are not bought, sold, or traded; for instance, recreation or clean air. Determining the value of these benefits requires non-market valuation methods, which will be discussed below. This is because the value of non-market benefits cannot be inferred from the price, because there is no price set by market behavior, as opposed to market benefits, where the value of benefits is inferred from the price consumers are willing to pay.

Non-market benefits are divided into three categories: direct-use, indirect-use, and non-use. Direct-use benefits are the benefits produced by goods that are directly used by humans, for example, recreational activities such as camping, boating, hiking, swimming, sightseeing, etc. Indirect-use benefits are those that are preferred for reasons that benefit society in ways that are not tied to direct use, for instance, benefits produced by goods that support humanity as a species, such as water purification, water supply, the protection of habitat, biodiversity, etc. Another example of an in-direct use benefit is valuing the scientific knowledge gained from the existence of some ecosystem or rare species (Aldred 384). Recall that these benefits are benefits solely because they satisfy human preferences. This is what it means to be a “benefit” based on this theory.

Finally, non-use benefits are those that do not depend on direct or indirect use, so the things humans value, even if they do not use them or ever intend to use them, for example, wilderness areas and protection of endangered species (Munns and Rea 333). There are several categories of non-use benefits. One category of non-use benefits is vicarious use, which is the value one gains from the "pleasure an individual experiences from knowing someone else uses an environmental good" (Aldred 384). Again, these are benefits, because they satisfy human preferences, so these benefits contribute to human welfare. If other people enjoy something or derive pleasure from its existence, or merely use it, then it is valuable. A second category of existence value is bequest value, which is the value one gains from the potential experiences of future generations, in other words, the value of some future use (Aldred 384).

A third category is existence value, which is a measure of value loosely defined as the willingness to pay based solely on the fact that nature or some environmental good is preserved, protected, and undisturbed; in other words, that it exists and that its existence is valuable because it satisfies human preferences (Aldred 384). Existence value is a type of non-use benefit, and this will be the primary theory of value I will focus on and say more about this below.

(c) Cost-Benefit Analysis

Market benefits are measured by the consumption habits and preferences of humans, which determines the value of ecosystem goods and services. These values are then used in cost-benefit analysis (CBA). In the environmental domain, a cost-benefit analysis is a method of "evaluating projects and policies that affect ecosystem services" in order to use resources in the most efficient way and achieve the greatest increase in well-being (Wegner, et al. 492, National Research Council 40). CBA aims to show us which policy will maximize benefits and minimize costs; alternatively, which policy will create the greatest benefit per unit of resource used. Achieving that goal might or might not involve minimizing impact on the environment. Proponents of ecosystem services often try to show that CBAs will involve minimizing impacts on the environment, by showing that impacting the environment means depriving people of valuable ecosystem services, but this claim is not part of what CBA is designed to do.

According to economists, CBAs show the value of the natural world (Bockstael et al. 2000). By using CBAs, economists monetize the environment, but also attempt to reconcile damage to the natural environment with some sort of financial gain or increase in well-being. If the benefits outweigh the costs, the damage to the environment is typically permitted (Booth 241).

Market benefits are easily priced based on the amount consumers are willing to pay. Non-market benefits, compared to market-benefits, are harder to monetize, especially the benefits of ecosystem services. Something like existence value may not easily be accounted for in a CBA, because it is difficult to place a monetary value on certain components of the environment (Knights, et al 10). The question is then how to determine the price of non-market benefits and place a monetary value on these goods and services. In order to quantify and place a monetary value on ecosystem services, economists use (i) “revealed preference” and (ii) “stated preference” methods.

(i) Revealed Preference

Revealed preferences are the preferences revealed through the “choices people make regarding goods in order to estimate the monetary value of non-market goods” (Knights, et al. 10), which include the hedonic pricing method and the travel cost method, both of which “reveal” the consumers preferences based on their consumption habits and patterns. The hedonic pricing method analyzes the cost of goods in close proximity to the specific area, for instance, the cost of housing next to a nature preserve. The cost of housing next to the nature preserve versus the cost of housing far away from a nature preserve shows an individual’s WTP for living nearby, which gives an idea of how much they value the nature preserve.

Another method of revealed preferences is the travel cost method, which measures the amount of money spent on visiting certain areas, for instance, a natural park. The amount an individual is willing-to-pay to visit these areas shows how much the individual values that specific area. The preferences of individuals in both methods are "revealed" through their willingness-to-pay for certain ecosystem goods and services. This is an indirect way of assessing the value of non-market goods by looking at market goods. According to proponents of revealed preferences, the advantage of revealed preferences, as opposed to stated preferences described below, is that market behavior is a better indicator of how much people are willing to pay for something rather than what they 'say' they are willing to pay.

(ii) *Stated Preference*

Stated preference methods are essentially surveys that ask specific questions about individual preferences and how much individuals are willing to pay (WTP) for a particular good, or how much compensation individuals are willing to accept for the loss of a particular good (WTA) (Knights, et al. 11). For example, if the nature preserve next to one's house was going to be destroyed in order to develop more housing, the individual's WTA is the amount of compensation the individual would accept in order to approve of the loss. On the other hand, if there was a proposal to restore a nature preserve next to one's house, the individual's WTP is the amount the individual would pay to restore it.

The two methods of stated preference surveys are "contingent valuation" and "choice modeling". Contingent valuation typically involves surveying individuals on how much they are willing to pay for certain goods, or how much compensation they would demand for the loss of those goods. Choice modeling involves listing out specific goods, and individuals must rank them, which is then used to determine WTP/WTA. (Knights, et al. 11).

The goal of both revealed and stated preference methods is to get an idea of the monetary value of non-market goods, like nature areas, ecosystems, species, etc. The information gathered from these methods, specifically the WTP/WTA, is then used in the cost-benefit analysis to determine value. The CBA provides insight into how people value certain non-market goods, which can determine whether or not environmental regulations are necessary, or whether to consume certain resources.

3.2 Existence Value

One type of non-use value is existence value. As with “intrinsic value”, there are many different definitions of “existence value”. Existence value is broadly defined as the value humans place on “simply knowing that a certain ecosystem or species exists, even if they themselves will never see it or derive any direct benefit from its existence” (Knights, et al. 10). Existence aims to describe the value of nature independently of nature’s use-value (Davidson 174).

Recall from page two, there is a theory of welfare in economics, and this includes existence value. Well-being in economics is defined as “satisfaction of preferences”, and in the case of existence value, the preference is for some part of the natural world to continue existing. As a result, preserving the part of the natural world satisfies their preferences and thus increases well-being. So, that part of the natural world is instrumentally valuable to that individual (National Research Council 36).

Existence value is by definition a type of instrumental value. Recall “instrumental value” is defined as the value something has if it is valuable for the sake of something else (i.e. as a means to an end). In the case of existence value, the part of nature that's continued existence satisfies some preference is the *means*, and the satisfied preference is *the ends*. Thus, the thing’s existence is a means to an end. Even though the individual might not value its continued existence AS a means to an end, the theory says that its continued existence is valuable only as a means for satisfying that individual's preference, and thereby increasing the individual's well-being.

Existence value is the theory of value I will focus on primarily in the subsequent sections. This is because existence value is the form of value that attempts to capture the value of nature *independent of nature's use-value*. As we saw in the first two chapters, instrumental value and anthropocentric value are in direct opposition with intrinsic and non-anthropocentric value. My overall goal is to see if economic theories of value can capture or are compatible with the claims made by intrinsic and non-anthropocentric value, and so far, existence value is the theory closest to these claims.

3.3 Aldo Leopold, Revisited

As we saw in Chapter Two, Leopold's community ethic requires certain claims about the value of nature[19] that includes recognizing the non-anthropocentric (weak claim) and in some cases intrinsic value (strong claim) of the eco-community and its members. This includes the claim that members of the eco-community have moral standing, that human members do not only have direct duties to the other human members of the eco-community, that non-human members of the eco-community are not valuable solely as a means to human ends, and that the value of the members of the eco-community do not depend on what humans think or feel about them.

We have also seen the different theories of value that economists use in order to try and capture the value of nature. The one theory of value that attempts to capture the claims made by Leopold is existence value. In this section, I will examine whether existence value captures the intrinsic and non-anthropocentric value of nature outlined by Leopold, or at the very least, whether existence value is compatible with the intrinsic and non-anthropocentric value of nature. As Davidson claims, “whether the concept of intrinsic value is compatible with economic valuation depends upon one’s moral view” (172). Leopold gives us a clear picture of his “moral view” that describes the kinds of value nature has.

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[19] Recall for Leopold, "nature" refers to the eco-community, which includes human and non-human members.

There are two main themes to claims of existence value that seem problematic from Leopold’s point of view: 1) that the “ecosystems services” approach means the natural world is treated as property or commodities, that are assigned a monetary value, capable of being bought, sold, traded, and acquired; and 2) that the value of the natural world is based solely on human welfare and human interests (O’Neill, *Markets…,* 26-27, Knights, et al 21). Both of these claims seem to be antithetical to claims of intrinsic and non-anthropocentric value. I will now go through each strong and weak claim required for Leopold’s community ethic to see if they are captured by or compatible with existence value claims.

When assessing whether existence value is compatible with intrinsic value claims, there are two different levels of assessment: 1) the content of human preferences, and 2) the theory of value as to why something matters, specifically the fact that human preferences and human well-being give something value. The first level has to do with whether or not human preferences capture or include the same claims as intrinsic value. The second level has to do with whether the theory of value of human preference satisfaction is compatible with intrinsic value claims.

The economic theory of value says that something has value in virtue of it being preferred by humans. It is a preference-satisfaction theory of well-being. This is based on the claim that satisfying preferences is what is good for humans. It is also a welfarist view or at least compatible with welfarism in that it claims what is good for humans is good. With this in mind, preferences can manifest in many different ways, some of which are easily tracked monetarily based on what we buy, but other preferences are not easily assessed monetarily. Existence value is a preference for something to continue existing, apart from any use or intended use by humans. It is a non-use value, but it is still instrumental in the sense that the thing's continued existence satisfies human preferences. Though these preferences can include that the eco-community continues to exist, the very theory of existence value is often incompatible with intrinsic value claims, as we will see.

Leopold is committed to several claims about the eco-community, as explained in chapter two. These claims are: thinking of the non-human members of the eco-community as being valuable for their own sake, meaning the members have moral standing, that it is false that we only have duties to the human members of the eco-community, that non-human members of the eco-community are not solely instrumentally valuable to humans, as a means to human ends; that their value does not depend on properties relating to humans; or that the non-human members are objectively valuable, meaning their value does not depend on what humans think or feel about them. Now we will go through each claim to see whether these claims are captured by existence value or at least are compatible with it.

(a) Valuable for its Own Sake

(i) Moral Standing

The claim Leopold is committed to is the strong claim of intrinsic value: that all members of the eco-community have moral standing. To have moral standing means that we should take the interests of the members of the eco-community into consideration when making decisions that may impact that thing. This means that human interests are not the only interests that matter.

Assessing whether existence value captures this claim or is at least compatible with is based on the two levels of assessment. On the first level, moral standing seems to be consistent with thinking of nature's intrinsic value as existence value. Existence value involves preferences, so my preferences might include taking into consideration the interests of the non-human members of the eco-community, for example. I might prefer that the eco-community is protected, and that the members are allowed to flourish, etc, so my preferences include the moral standing of the eco-community in this instance, so the interests of the non-human members of the eco-community are taken into consideration, which would capture the strong claim of intrinsic value.

On the second level, however, what gives the eco-community and the non-human members moral standing is the fact that my preferences include them. My preferences are still what is giving the eco-community any kind of value. Existence value only includes moral standing if the content of our preferences includes regarding it as having moral standing. According to existence value, it is only true that the ecosystem has moral standing if my preferences include the ecosystem having moral standing. In other words, there is no moral standing of the ecosystem independent of my preferences.

There is a difference between "wanting something to exist regardless of use" and "something's interests mattering morally". Even though existence value aims to capture the non-use value of nature, existence value still ties the value of nature to the interests of humans. The interests of nature matter only insofar as they contribute to the well-being of humans. As a result, decisions impacting nature are based on whether they increase the well-being of humans, not based on what is best for nature. The idea of moral standing is that the members of the eco-community have a specific kind of status that does not depend on whether others care about the members or want them to have that status.

The strong claim of moral standing is saying that the interests of nature matter, and this is true independently of anyone's preferences about its moral standing. It is not a claim about whether we want or prefer to take their interests into account, it is a claim that we should take them into account, no matter what, and existence value is not compatible with this claim.

(ii) Direct Duties

The claim Leopold is committed to is the weak claim of non-anthropocentrism: that it is false that we only have direct duties to humans. Though Leopold does not take a stance on which members of the community we have direct duties to, it is clear that we do not have duties solely to the human members. Having duties to something means it receives a special moral status, so this is important for Leopold, because the eco-community and the eco-community members need to receive moral status apart from instrumental use.

Recall in the Odysseus story, Odysseus did not have a moral duty to kill the slaves for misbehaving, but the point of that story was that there is no moral duty constraining his actions of treating other humans as property or commodities. Their only importance is that of usefulness. In economics, "moral concern" or "moral duties" are not often discussed. Economists are concerned with value and maximizing human well-being. The question is whether economic theories of value, specifically existence value, are able to capture or consistent with ethical claims about duties to the natural world, and in this case, whether treating non-human members of the eco-community as a commodity is compatible with ethical treatment.

With that in mind, "moral concern" is limited to human beings, meaning the interests of humans are what matters. Recall from Chapter one that direct duties describe *what* we have duties to and *who* could be wrong if those duties are ignored. With existence value, the interests of humans are tied to the existence of nature, but economics is not concerned with the idea of wronging something or having duties to something, whether in nature or otherwise. Existence value is about the preferences humans have for nature to continue existing, not about the duties we may or may not have to nature, nor about wronging nature. Existence value, as a result, cannot capture the direct duties claim of intrinsic value.

This is problematic for Leopold; the claim Leopold is committed to is that we do not only have direct duties to our fellow humans, as members of the eco-community, and this is not even a topic of discussion within economics. By leaving out any discussion of duties, this means that the members of the eco-community do not have equal moral standing and that humans may not respect the interests of the other members. The point of ethics, and the direct duties claim in this case, is to constrain our actions, even if it is more economically expedient for my well-being to do otherwise. By treating the non-human members of the eco-community as commodities that are only useful insofar as they satisfy human preferences, we ignore that we have direct duties to the non-human members.

(iii) As an End In Itself

Leopold is committed to the weak claim of non-anthropocentrism: that non-human members of the eco-community are not solely valuable instrumentally, and their value is not determined by their usefulness to humans. It is not clear whether Leopold is committed to the claim that all members are valuable non-instrumentally, but in some sense, Leopold cares about the individual members and is committed to the claim that they are not solely to be used by humans.

At first glance, this seems problematic for economic valuation, because Leopold's claim is that of non-instrumental value, whereas economics focuses on instrumental value. As I explained, existence value attempts to capture the non-use, or non-instrumental value of nature, but the question is whether it does so successfully. Existence value is based on humans knowing something in nature exists, whether it be a species or ecosystem, independent of whether humans even intend to use it or not.

We can again apply the two-level assessment to the claim of existence value. On the first level, based on the content of human preferences, nature can be valuable, and preferences can include non-use value. This is exactly what existence value aims to capture: the value of something that is seemingly non-instrumental, or not a means to some other end. In other words, existence value is the value a thing has when a person does not intend to use it, they value it simply because it exists, and one can prefer something exists for this very reason.

However, on the second level, even existence value is still instrumental value, because even though it is not tied to direct use-value, nature only has value insofar as it satisfies human preferences. The existence of nature is valuable as a means to an end. In chapter two, I defined an "end" as a "goal" or "purpose", and the "means to an end" is a way to achieve that goal. With existence value, the "end" is satisfying human preferences. If the existence of nature did not achieve that end, meaning if people did not prefer that it continue to exist, then nature would not have value.

With existence value, the eco-community and the non-human members are only valuable as a means to the end of satisfying human preferences, so existence value is an instrumental, and anthropocentric, theory of value. The way to achieve this end is through human preferences for the existence of certain aspects of the natural world, but this does not take into consideration what may be good or bad for nature. Nature is not valued *as an end itself*, rather, nature is valued for the benefits derived from "ecosystem goods and services" that increase human well-being, and ecosystem goods and services are valuable *because* of their crucial role in supporting humans.

In other words, ecosystem goods and services are valuable solely *instrumentally*. The continued existence of some component of nature contributes to the well-being of humans, while ignoring the well-being of nature. The claim with existence value is that if no humans wanted it to exist for any reason, it would no longer be valuable, and Leopold disagrees with this.

(b) Intrinsic Properties

The claim Leopold is committed to is the weak claim of non-anthropocentrism: that it is false that all value of the eco-community and the members of the eco-community depends on a relation to humans. Again, it is unclear whether this is something Leopold needs for his community ethic, but nonetheless, the two level assessment still applies in terms of existence value capturing this claim or at least being compatible with it.

On the first level, existence value can capture the claim that the value of the non-human members is not dependent on a relation to humans. Someone may prefer something to continue existing not because of how it relates to humans, but in virtue of the intrinsic properties of that thing. However, on the second level, the intrinsic properties claim is not compatible with existence value, because the thing's value is still relational; the thing's value is still determined by a relation to human preferences. The thing is only valuable in virtue of its relationship to humans, depending upon human preferences for the thing. If everyone stops preferring that the thing exists, then it is no longer valuable.

(c) Objective Value

The claim Leopold is committed to is the weak claim of non-anthropocentrism: that the value of the eco-community members does not depend on what humans think or feel about them, either based on individual preferences or socially accepted norms. There is again a two-level assessment of this claim. On the first level, existence value can capture preferences that may indicate or imply that members of the eco-community have objective value. Humans can prefer to think that the value of the natural world does not depend on what they think or feel. For example, many humans may prefer that national parks continue to exist, even if all humans die off.

However, on the second level, the value of the eco-community members depends on whether they satisfy human preferences, and these preferences would mean preferring that the members have value. For the members of the eco-community to have objective value, their value would have to be independent of what humans specifically think of them or feel about them. Existence value is the value something in nature has based on the preferences of individuals, and preferences are based on what individuals think and feel about something. Value, in economics, is subjective:

> Value (based on individual preferences) is what individuals prefer in contexts of choice. Here valuing and its product, value, lie in the experience of interest satisfaction. In this sense valuing is subjective; valuing brings value into being within subject-owners, who are persons in their relationship to the world. (Rolston 254)

In this sense, existence value has a clear commitment to subjectivism, because the value of the members of the eco-community are determined by humans preferences. Though existence value may be able to capture objective value insofar as humans prefer that the members of the eco-community continue to exist independently of what humans think or feel about them, the value of the members depends on humans having these specific preferences. Existence value is not compatible with the objective value of the natural world independently of human preferences.

The value of nature is determined by what humans think or feel about it, even if that is independent of how they use it.

3.4 Conclusion

In sum, existence value aims to capture the value of nature, *independent of nature's use-value,* or non-instrumentally. But the value of nature is internal to preferences, meaning it is based on the satisfaction of human preferences that include nature's continued existence. The goal of this chapter was to see whether existence can capture or at least is compatible with claims of the intrinsic, non-anthropocentric value of nature, specifically according to Leopold's community ethic. These claims were thinking of the non-human members of the eco-community as being 1) valuable for their own sake, which includes the strong claim of moral standing, the weak claim of direct duties, and the weak claim of as an end in itself; 2) valuable independent of a relation to humans (weak claim); and 3) valuable objectively, independent of what humans think or feel about them (weak claim).

We approached these claims from a two level assessment, dealing with the content of human preferences and the theory of value behind those preferences, the first aimed to capture the claims of intrinsic, non-anthropocentric value, and the second aimed to be compatible with those claims. As we saw, existence value falls short when it comes to the intrinsic, non-anthropocentric value of nature. Not only does existence value fail to capture these claims, but it is not even compatible, except insofar as human preferences include these claims.

My goal is not to disparage the economic enterprise, but rather to show the inadequacies of economic value theory's claims about the value of nature. Economics, specifically markets and market analysis, is a persuasive component to our everyday lives as consumers that dictates the relationship we have with the natural world. The need for an environmental ethic calls this relationship into question, specifically the commodification of nature. By putting nature into this category, we prevent people from thinking in ways that respect the value of nature. Leopold’s *Land Ethic* was a pivotal work in environmental philosophy that described this relationship and outlined an environmental ethic, which provided a relevant course of action for how to live in better accordance with the eco-community and the natural world. If economics could better capture the claims made by intrinsic and non-anthropocentric value theory, as outlined in Leopold, then we could change policies and behaviors, to better protect, preserve, and care for the natural world, which is ultimately my goal in laying out the specifics of the value of nature.

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