CONSERVATION ETHICS: AN OBLIGATION-CENTERED APPROACH

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ABSTRACT

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Thesis directed by Associate Professor Benjamin Hale

Environmental ethics has generally taken up nature conservation as an issue of environmental value: we ought to protect nature to protect value in nature. This value-centered conservation ethic raises three categories of problems: theoretical challenges over the commensurability and substitutability of environmental value; discursive hurdles with how we talk about conservation; and practical problems with how conservationists put philosophical tools into actions. I investigate these problems in concert to show how obligations provide a plausible alternative account of why and how we ought to protect the natural world. This dissertation argues first that a value-centered approach has overwhelmingly been used to defend conservation; second, that such an approach is unwieldy and impractical; and third, that moral obligations offer a plausible alternative ethic that explains, defends, and prescribes the conservation of nature. I use a review of relevant literature, a series of thought experiments, and three case studies. The case of wolf management in Denali, Alaska highlights the "Substitution Problem," which calls into question the substitutability of value. The case of salmon conservation and hydroelectric development of the Susitna River in Alaska provides an example of how a broader focus on reason would support an obligation-centered idea of conservation. The case of geologic preservation in Goblin Valley State Park, Utah shows how an obligations framework already grounds many environmental protections and accounts for a wider scope of conservation. I find that intersubjective agent-centered obligations explain that we ought to protect nature because of moral principles established by reasons that hold up to the scrutiny of others.

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PROLOGUE AND INTRODUCTION:

VALUE AND THE CONSERVATION CONVERSATION

Prologue and Introduction:

Value and the Conservation Conversation

"There are some who can live without wild things and some who cannot."
-Aldo Leopold

Consider the following:

Phil

Phil is the last person on earth. The world is a barren wasteland, but for one last oasis of life. On a whim, Phil blows-up this oasis.

If you feel, as I do, that the world ought not be destroyed in this way, we might ask why? This is the conservation ethics challenge. Why oughtn't Phil destroy the oasis? Why ought Phil protect nature? Similar thought experiments to *Phil* have been used to make a case that nature ought to be protected from destruction even in a 'Last Man' scenario because of nature's inherent value, but alternative environmental ethics can also defend an environmentalist intuition that Phil should not destroy the oasis.¹

Richard Sylvan² first devised the 'Last Man' argument in 1973 (Sylvan, 1973).³ Traditionally the view has been that if you think that there is no wrong done in destroying a world void of humans, then you are likely sympathetic to

¹ I mean 'intuition' generally how philosophers use the term, referring to presumed knowledge that does not come from conscious reasoning.

² Prior to 1983, Richard Sylvan went by Richard Routley.

³ Sylvan's thought experiment was in many ways anticipated by G.E. Moore's famous thought experiment aimed at establishing the external value of beauty in the world (Moore, 1903).

an anthropocentric perspective on ethics, and if you think that a wrong has been committed, then you are likely sympathetic to a perspective that places intrinsic value on non-human nature. Sylvan's intention was to prime an intuition that value resides in the natural world independent of the existence of humans. In many ways this is the classic divide in environmental ethics. Also, an intuition that one oughtn't destroy the world even if you are the last person left has served in many ways as motivation for the emergence of the modern environmental ethics discourse. One common view within this discourse holds that we need to establish intrinsic value because anthropocentric ethics cannot account for environmental protection. This dissertation argues not that Phil ought to destroy the oasis, but that such a view does not hinge on establishing objective intrinsic value.

Finding intrinsic value—the ethical value an object may have for its own sake—in the above example may solve the problem of conservation by dictating protection for the natural world. However, while intrinsic value might reflect something real in nature, the act of finding it might represent a confirmation bias that ignores other possible solutions. If we search for intrinsic value in the last man scenario, we will surely find it, a dangerous problem with such examples. But, if we are freed from any preconceived notion about intrinsic value, an intuition that one ought not destroy the world can be understood in several ways not married solely to intrinsic value as ethically necessary.

Perhaps we ought to protect nature because it is beautiful or full of life, because we depend upon it, because it has intrinsic worth, because of its complexity, history or ontology. Or, perhaps we ought to protect nature because of some responsibility we hold, a duty regarding the natural world?

The first option—Sylvan's solution—suggests that the value of nature holds moral force, protecting nature consists of protecting value found in nature, and degrading nature constitutes the loss of such value. In *Phil*, Sylvan's approach finds wrongdoing in the loss a presumably intrinsically valuable oasis. Again, call this first approach the value-centered approach. This approach compels a search for and an understanding of value, and intrinsic value in particular, in nature.

The second option suggests something about the nature of our agency—that we have an obligation to justify our actions regarding nature and its disturbance, not because of some value in nature but because of what moral agency demands of us: the consideration of the full spectrum of values and other reasons. In *Phil*, this perspective would find wrongness in the destruction of the oasis, not in the loss of what comprised the oasis. Again, call this second approach the obligation-centered approach. The obligations-centered approach places moral force not with value, but with us—a perspective that has been largely overlooked.

So, which is it? As I will discuss throughout this dissertation, value-centered approaches to environmental ethics have been accused of having, as Onora O'Neill puts it, "difficulty in according ethical concern to [certain] aspects of [the] natural world" (O'Neill, 1997). Following the charge given by O'Neill, an obligation-centered approach can succeed where value-centered approaches have failed. Theoretical challenges inevitably impede conservation if agreement on environmental axiology must precede conservation ethics, but, more importantly, the chances of a coherent collaborative conservation effort moving

through practical disagreement to solutions that protect nature are unlikely if only one value perspective is correct.

In this dissertation, I argue that an obligations-centered approach to conservation ethics—specifically focusing on what we as agents owe rather than on what value exists—could more effectively help untangle the multiple perspectives and values at play in conservation conflicts. If metaphysically real value grounds conservation, then value is a zero sum game in conservation debates—one perspective is right only at the expense of all others. If we ought to protect nature to protect value, then our ethics do not integrate the full spectrum of reasons into the conversation. Obligations stemming from justification, rights, responsibilities, and moral debt prescribe the protection of nature with competing perspectives on value as competing reasons. This alternative avoids the practical problems of disagreement over environmental value, avoids theoretical problems with proving the source of environmental value, and intuitively calls for the protection of nature. A major upshot of this view is that even without rigorous proof of or complete agreement on environmental or intrinsic value in *Phil*, Phil still oughtn't destroy the world because he has no reason to do so.4

My Aim

I investigate, in this dissertation, the ethics of environmental conservation and explore the growing need for a non-value-centered conservation ethic. I do

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⁴ I will return to this upshot in my conclusion.

not mean 'conservation' in any technical sense, but instead use 'conservation' here the way the modern environmental movement and environmental community use the term. Colloquially within environmental studies and the environmental community, 'conservation' refers both to the general suite of environmentalist actions aimed at the goal of protecting nature as well as the goal of protection itself. By embracing this double usage I highlight the notion that 'conservation' is something to be achieved as well as something to be done. As I will show in the following chapters, the task of conservation has often been theoretically reduced to a matter of accounting for environmental value.

I defend a conservation ethics position that our obligations concerning the natural world better describe, justify, and explain the conservation goal of reasonably protecting the natural world. While Conservation Biology as a discipline covers a wide range of projects—in general the field is the scientific study of living nature aimed at providing tools for protecting biodiversity, complexity, and biotic interactions (Van Dyke, 2008)—conservation ethics can be understood similarly as the philosophical study of nature aimed at understanding the moral reasons for protecting nature.

Moral propositions within the conservation world like 'higher species diversity is good' (Soule, 1985) all rest on some set or normative axioms that get us from descriptions about the world to some understanding about how the world ought to be. The gap between description and normativity is not so easily bridged. Known as the 'is-ought problem,' David Hume famously argued that logically one can never derive an understanding of what ought to be only from a descriptive understanding of the world (Hume, 1739). Just because lions eat zebras does not mean lions ought to eat zebras; just because greater biodiversity

is prudent for resilience in an ecosystem, does not mean that it is morally good beyond just prudence. To bridge such gaps, ethicists provide moral arguments in defense of moral postulates that are able to justify normative claims on the basis of descriptive claims. Moral value is one popular type of postulate. If we could understand intrinsic value such that greater biodiversity always has more of it than less biodiversity, then it logically follows that if an action decreases biodiversity it is (all else being equal) bad.

Value can be understood in many ways, but generally refers to the worth something has, its importance, or the regard in which something is held. Intrinsic value is a property that reflects the worth something has in and of itself. Extrinsic value is the worth of something provision toward another end or value. Many theories of value suggest that the value of a thing resides in some quality or attribute of it, like life, complexity, beauty, or function. Value-centered ethics refers to any ethical perspective that suggests these attributes alone provide the reason for, motivation to, and good in protecting nature.

While discussions of value are not uncommon, especially in the environmental world, similar understanding of obligation is far less common. Obligations offer another bridge across the is-ought divide. In the proceeding chapters I will discuss the neoKantian rationale for obligations, but for now I want to make it clear what I mean by 'obligation.' An obligation can be understood in a few a ways, but for my purposes in this dissertation, I intend 'obligation' to refer to two things: a debt or a restriction. If you lend me money, I am indebted to you for that money. If I break your window I *owe* you a window. If I owe you five dollars, you have a claim against me for five dollars. Symmetrical to my debt is your claim. If you have a mining claim, say, then I am

obliged not to claim jump and start mining your land; this is a restriction on my behavior. If you have the right of autonomy, then I am obligated to respect that right. So what we owe to each other with regards to nature would be the obligations we have because of social, interpersonal, and individual debts. In this way, obligations are often thought of (on Kantian grounds) as fundamentally grounded in reciprocal relationships (Kant, 1983). Responsibilities and restrictions stem from the duties we have and claims that others hold.

Obligations that stem solely from rights act quite a bit like value in their moral force. Because intrinsic rights can act quite a bit like intrinsic value my dissertation is mostly be concerned with so called 'agent-centered' obligations—stemming from duties, permissions, and restrictions that moral agents hold as a result of the justifiability of their actions.

I argue that, generally speaking, theories of value have provided the basis for how environmental ethics has approached conservation in the past by assigning the moral imperative for protecting nature in the protection of nature's worth (most typically because of nature's *intrinsic* value)—call this the value-centered approach. Value-centered approaches to conservation ethics suggest we ought to identify, quantify, and solidify environmental and intrinsic value. However, obligations and responsibilities regarding the natural world place the moral imperative for protecting nature in the justification of our actions and what we owe to each other, should provide the basis going forward—call this the obligations-centered approach.

Obligations-centered approaches to conservation ethics suggest that environmental value-centered approaches are not necessarily wrong about value but are necessarily narrow and are not needed as an ethical motivation for protecting the natural world, in fact efforts to promote or maintain value can stand in the way of achieving environmental protection. Conservation, instead, is best understood as an obligation stemming from a suite of reasons, not just theories of value.

My thesis boils down to the following:

- 1. Environmental ethics has not provided tools for understanding most calls to protect nature or conservation efforts beyond an ethic that suggests we ought to protect nature to protect value in nature.
- 2. Narrowly construing specific environmental value as action guiding both restricts the scope of conservation as well as causes theoretical challenges at the core of age old environmental debates (over the likes of intrinsic value or the substitutability of value).
- 3. Obligation-centered ethics intuitively both describes a broader range of conservation activity than value-centered ethics and reveals how we often already actively protect the natural world in practice.
- 4. Real-world conservation comes out of messy compromises, hierarchical priorities, anthropocentric preferences, and a myriad of personal, interpersonal, and social reasoning about the natural world.
- 5. Therefore, obligations-centered conservation ethics provides a

plausible alternative account of why and how we ought to protect the natural world.

To demonstrate my thesis I will show how specific environmental axiologies have commonly been taken as action guiding in conservation ethics. I will show how theoretical and practical hurdles emerge from the ethical assumption that protecting nature is protecting value in nature. I will demonstrate why value agreement is unnecessary for conservation to get off the ground and how agent-centered obligations plausibly describe nature protection. Finally, I will show how such obligations already lead to effective conservation by providing an ethical basis for certain legal obligations.

The real world counterpart for my theoretical thesis will involve my three case studies. In choosing cases I have aimed to look at a diversity of scales, goals, and conflicts within conservation. Three is no magic number; rather, I have chosen each case to demonstrate a specific point. I use the case of wolf management in Denali Alaska as an example of wildlife conservation and conflict over axiological agreement. I use the Susitna Dam as an example of conservation as a response to development, landscape conservation, and the messy compromise inherent in real world cases. Finally, I use Goblin Valley as an example of abiotic nature conservation without conflict. In each case I tie in philosophical analysis and thought experiments. These examples not only highlight key facets of my thesis, but also aim to show conservation emerging as an obligation stemming from an integral incorporation of perspective, value, and consideration.

Let me take a step back for a moment to show where this project emerged for me. When certain environmental values are asserted as dogma, it is unlikely that disparate perspectives will be fairly considered within the institutions, policies, and processes of conservation (some might call this a concern for epistemic justice). Beyond this, an ontological hurdle for any effort to 'save' something in the natural world is the bounding of value as a property.

Naturalizing environmental value is just endlessly wooly when one walks outside. These two theoretical concerns should be taken as requirements for consideration: an ontological requirement that seeks to understand what it is that we are striving to save when proceeding with nature conservation, and an epistemic requirement that situates norms of conservation in an ethic sensitive to scale, culture, location, and the sticky nearsightedness of knowledge when it comes to the natural world.

Allow me a brief tangent that I hope will help explain where my interest and perspective on nature protection comes from. I wrote the following passage on a rainy Wednesday in late June, 2013 while looking east towards the Yanert Valley and Eastern Alaska Range from a cabin in the Interior of Alaska. The thermometer outside reads 47 degrees Fahrenheit and my dog Ziggy is nestled by the wood stove. Although it is midafternoon, the thick cloud cover makes the cabin feel dark. Sitting at roughly 63.3 degrees North latitude—some 250 miles south of the Arctic Circle—cloudy afternoons are about as dark as it gets this time of year in the Interior; I will not see stars until August. This cabin has been here for some 50 years. It is nestled across the George Parks Highway and

Nenana River from Denali National Park and Preserve, a 6.2 million acre expanse in the heart of the great mountains of the Alaska Range.

Through the mist from the cabin I can see the flanks of Carlo Mountain. Rising from Taiga to Tundra, the shoulder of this mountain has been sculpted out over more than two million years of successive advances of the Nenana Glacier during the great ice ages of the Pleistocene. The drone of cars on the highway breaks up the silence to the west, but beyond Carlo to the east, one hundred miles of road-less, trail-less space separates this place from the nearest road. These mountains see many moose, caribou, sheep, and bears, but few human travelers. It is unprotected by legislation or management, but highly protected by its size, rugged terrain, and inaccessibility.

Denali National Park, on the other hand, sees half a million visitors a year, and though active management is hard to see on the landscape, a large crew of people steward the Park. While the central two million acres of the Park is federally designated Wilderness, both sides of the road are what most would undoubtedly call 'wild'. While not the topic of this dissertation, I often wonder what that means. I have come to conclude that wildness is a relationship, an emergent experience of leaving the controls of society and entering the freedom of the land. For some, a short ride on the Park bus dissolves any feelings of comfort and illusions of the known; for others, it may take two weeks of unplanned travel into the eastern wilderness.

These spaces, Denali and the wilds to the east, have just about every attribute that would qualify them as 'nature,' 'wilderness,' or 'wild' for most people. Both sides of the road are protected in their own way for now, though both are very different because of how they are protected. Depending on how

and where one finds that wilderness or naturalness, one may value different attributes of each space while agreeing on 'wilderness' as a worthwhile management goal, and important value of this place overall. Such disagreement is perhaps obscure, and yet it sheds light on a broader issue. Many of us who find the wild beyond the reach of any mediated experience, past the buses and roads and guidebooks, find ourselves wondering if the bus window through which most people view this place is a 'true' wilderness experience. This is important because in a place where every year more than four hundred thousand people show up to see wild land and wildlife but not to venture off a Park bus or head away from the front country (while only a few thousand individuals seek a backcountry experience), many management decisions aimed at conserving the 'wilderness' of the Park prioritize the wilderness experience of that majority.⁵ Conservation in this part of Alaska is the hot melding of parks and space, and wildlife, and hunters, and hippies, and wolf trappers, and subsistence users, and 14,000-years of human history that has recently struggled to find a space for increasing use and visitation in an incredibly vast landscape.

Conservation here comes in the form of the National and State Parks, official Wilderness, unofficial wildness, predator control and predator protection, mining, moose hunting, salmon fishing, trail construction, and a vast array of 'uses.' It is both active and passive. Conservation efforts aim to manage use, while also dictating use; Conservation efforts aim to avoid certain impacts on the natural world, while also promoting certain impacts on the natural world. It is complicated.

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⁵ For example, the Park has recently decided that it will discontinue the 'Camper Bus' system that provided transportation specifically for campers and backcountry travelers.

To solve the novel problems of today we need an ethic that can practically move forward, avoid conflict, engage people, place, and animals, and consider multiple perspectives. Aldo Leopold famously wrote about a need for extending a new ethic to the natural world; he called this a needed step in the 'Ethical Sequence,' expanding what ethics covers from interpersonal and social to environmental (Leopold, 1949). The problem before the problem, then, is how to successfully do so without undermining the goal of nature protection. As Miranda Fricker writes, "the capacity to give knowledge to others is one side of that many-sided capacity so significant in human beings: namely the capacity for reason" (Fricker, 2007 p.44). For environmental ethics to guide normative understanding in today's world, theories of environmental ethics must give knowledge to diverse and divergent environmental perspectives, building an integral ethic that encourages cooperation and problem orientation. Taking environmental axiology as a metaphysical reality at the heart of environmental ethics does not allow for disagreement, subjective perspective, or deontological moral principles to enrich the conservation agenda; ultimately this constricts the extension of morality that titans of modern environmentalism and ethics, like Leopold, were calling for.

A common aim of the Park Service in Denali, as it is everywhere, is to protect visitor experience, yet others want to protect animals, and others still want to trap wolves. Hands-on or hands-off, the values at play in a dynamic human system govern a web of arguments, justifications, and approaches to protecting nature. That it should be protected is not ultimately the question, but rather questions of how, where, and for whom take center stage. Should we save the historic population of animals in their 'natural' order, should we remove

invasive species, should we kill wolves in the hopes of boosting moose populations? The values that dictate our human impact on, management of, and protection for nature are not always obvious, but ground the prescriptive moral weight behind our choices, permissions, and restrictions. Because conservation efforts are by nature goal oriented, questions of conserving nature are scientific and political but also fundamentally normative. My aim in this dissertation is to take up the difficulty in adjudicating between competing values within environmental conservation.

Environmental ethics has in part sought to reorient our perspective on the natural world, extending an ethic to the environment. This task has lead environmental philosophers to overwhelmingly defend some theory of value in the natural world as central to our ethical relationship with nature. Hitching environmental axiology to ethics assumes that we absolutely need to get our understanding of value right before moving forward with moral prescriptions. Joseph DesJardins highlights this perspective: "One way to understand the philosophical shift that is occurring among environmental philosophers is to contrast questions of morality with more general questions of value...central to a comprehensive environmental philosophy is a consideration of the nature and scope of value" (DesJardins, 2013, p.129). However, while this discourse has illuminated many novel ways of thinking about what matters in nature, it also overlooks the key practicality an ethic must have to be action guiding. Rather than viewing the plurality of value in the natural world contextually, environmental philosophy often gets hung up on reducing value to a metaphysical reality, whereby some theory is correct and others are incorrect, and whereby some attributes, qualities, or composition alone source value (i.e.

life, biodiversity, function, and so on). This makes environmental value not only intangible in identification but also intractable, something particularly pressing in the application of environmental ethics to contemporary environmental conservation.

While there are many problems that arise in connection with the environmental value-centered approach, I focus on the following three: a problem of focus that arises from a reductionism of value to be conserved, a problem prioritization that arises from an incommensurability of conservation foci, and a problem of why we ought to protect abiotic systems, which is a particular puzzle for protection approaches that ascribe value only to living entities. Short case-studies help illuminate the nature of these problems, allowing me to consider how an obligations-centered approach to conservation might get off the ground without appeal to intrinsic or realistic value. While I draw on several real world examples and thought experiments throughout this project to make my case, the three primary case studies each serve as key examples of particular challenges with using realistic value to call for conservation and each offers a unique angle on a problem that would not be as clearly illuminated in any one case alone.

While I do not exhaustively construct a specific obligations-approach to conservation ethics, I explore how the duties that we humans hold to each other sidestep many of the obstacles posed by the value-based approach. I also use these case studies to address common objections to an obligations-based view, including claims that such views are necessarily anthropocentric, cannot

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⁶ I mean realistic here in the way O'Neill uses the term; O'Neill refers to value theories that depend on recognizing real value that is out there in the world as 'realist,' (O'Neill, 1997).

incorporate the natural world directly into the moral equation, and (therefore) cannot protect nature. Against such objections, I maintain that an obligations-based conservation ethic can justify environmental protection in an intuitively appealing way.

Just as I may have certain obligations to you with regard to your dog Spot, regardless of the intrinsic value of Spot, so too might we have obligations to each other with regard to nature, regardless of the intrinsic value of nature. We have expressly taken up responsibilities for certain places and aspects of nature; wildness and many other worthwhile aspects of nature are fundamentally interrelational, obliging us to consider the experiences of others in relationship with nature. Our social contract grounds obligations to each other that regard nature.

Many troubles stand in the way of attempts to promote or prohibit conservation. Such troubles have often been the focus of environmental ethics. The focus in environmental ethics, however, has not tracked conservation in the real world as well as perhaps it could. A focus on defending and defining intrinsic value has arguably taken center stage. I will discuss this much more in chapter one. For now, it is important to keep in mind that most of my critique is directed towards the conservation within the environmental ethics discourse, not in how conservation actually unfolds (important if environmental ethics aims to provide useful tools and not such theoretical expectoration).

The legion conservation practices, policies, and inspirations suggest a wide-ranging and dynamic appeal to value within the conservation community.

⁸I intend to draw on modern contracualism, as well as discourse ethics to make my case. See Scanlon, 1998; "Discourse ethics," in Habermas, 1991.

⁷ This idea comes from Korsgaard, 1996.

Such appeal relies on many normative assumptions about value in nature, and because of this, conflicts in the conservation world necessarily involve conflicts between different normative agendas. Traditionally, environmental ethics as a pursuit has sought to clarify and defend these assumptions, doing so by focusing on the protection and promotion of value as the reason to protect nature. This value-centered approach forces the conservation discourse to narrowly defend and debate particular theories of value.

Obligations-centered ethics, not widely considered in the environmental arena, suggests that instead of protecting nature to protect value, we ought to protect nature because of what we owe to each other and the natural world. The obligation-centered approach has been widely defended by ethicists in other arenas. Their appeal to an array of reasons, justifying certain impacts on the environment but not others, would better defend the normative underpinning of a dynamic conservation discourse.

In many cases where the protection of nature is pitted against the use or development of nature, value-centered ethics reduce the conservation issue to focus on measurable, comparable, and tangible values. This suggests that nature is a locus for values that we can protect or ignore. Advocates may argue that intrinsic ecological value is out there to be discovered in the world. Without suggesting this is false, I will aim to demonstrate how unwieldy this view is and show how an obligation-centered approach more productively calls for an integration of differing norms and normative positions.

My objection to the main stage presence of axiology in conservation may at times seem like an obvious critique or straw man of intrinsic value's use, but in the real world, such an overt focus on what nature is worth derails the conservation conversation. I will argue that this is because value-centered ethics fail to include important aspects of nature, suggest dangerous trade-offs and priorities, and get hung up on age-old debates like those of commensurability or the source of intrinsic value.

For example, the Susitna-Watana Dam, currently being considered for construction by the state of Alaska (and a focus of chapter four), has the potential to be the largest dam in the country. Many people find it surprising that a new dam the size of Hoover could be built in the middle of the wild for unsure future energy needs. The debate over whether or not to build the dam has pitted conservation of local resources like salmon and wilderness against energy resource development. The more conservative approach has highlighted the value of the salmon: "The river supports subsistence traditions, sport fishing and commercial fisheries, and as such, its contributions to the people of Alaska are tremendous," (Hagenstien and Smith, 2015). The dam authority, though, has approached the problem largely as a technical one: "Ms. Ford, the spokeswoman for the energy agency, said that all the major issues, from stream flows to fish behavior, are being studied in an extensive review process..." (Barringer, 2013). Throughout the debate, the language used to espouse the value of these elements of the conservation equation has evoked a value-centered ethic: "it will cost nothing to just leave the Susitna alone. Here's hoping the state's new leadership can see through the lies purported by AEA and abandon this project in the name of common sense, if not simply for the preservation of uniquely adapted wild Alaska salmon" (Stanford, 2014). This type of commentary represents a common approach in these debates—the assertion of value according to particular perspectives and the assertion of disvalue according to other perspectives. The

ontological requirement would ask here what it is that is worth saving in the Susitna case. Is it the river? The experience? The fish? How do we understand these as subjects or objects of moral obligation? The epistemic requirement would ask how we incorporate different subjective perspectives and experiences into an understanding of objective moral judgments. Do we equitably consider the plight of the fisherman along with the needs of energy users? Can we include a fair understanding of the truth of a dam for a fish or fish community? Challenges in meeting these requirements often are at the heart of conflict, gridlock, and opposition to conservation.

If protecting nature has intuitive appeal, then why do conservation efforts meet such debate or resistance? The Alaska Energy Authority is not pursuing the project without reason. Instead, a value-centered approach to protection is underpinning conservationism concerned with preserving specific natural value, facing down the dam authority without engaging philosophically with all the justifications behind the project. Similarly, the dam authority is approaching the project from a different value-centered point of view, concerned with the economic value of the dam and framing the environmental values of the Susitna as substitutable with other ecological and economic values, failing to incorporate the full scope of perspectives on the issue. While the distinction is fundamentally theoretical, environmental ethics, as a pursuit and body of work, stands to provide the tools and language to parse out and understand the theoretical dimension of the principle normative disagreement.

While dissecting the underlying value of the land and the dam is no doubt important, environmental ethics has largely failed in its ability to provide tools for helping move forward such real world conflicts at ground level. It is easy to

criticize and dissect such development from a distance. In Alaska there is a mounting conservation battle that has embittered and entrenched many communities that could be affected by the dam. Environmental ethics has often approached such matters at an abstract level, providing tools for investigating the human non-human dichotomy and environmental axiology unfolding from our ethical relationship with the natural world. Perhaps, for example, describing the intrinsic worth of the Susitna ecosystem, but the practical value of these ethical tools comes in the form of action guidance, something overlooked all to often.

My investigation here concerns the common difficulty in using what some call 'metaphysically realistic' value—value that is objectively out there in the world—in order to guide action that protects nature. I will fully explain and defend this concern in section four of chapter one. Obligation-centered ethics orient our ethical discourse around reasoning and justification, not the definition and discovery of value. In doing so, obligations offer a new direction for conservation to consider protecting nature for lots of reasons.

My exploration unfolds in six chapters. In chapters one and two, I provide the context for my investigation by reviewing contemporary conservation and environmental ethics discourse. While a full review of primary conservation goals and motivations would be beyond the scope of this project, I review the normative foundation of modern conservation ethics from an historical, ecological, and philosophical perspective. This discussion shows how environmental ethics has come to focus on value realism—a view that value is

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⁹ I mean this technically. As I will explain in chapter one, *realistic value* refers to value that is metaphysically real, out there, and discoverable in the world (O'Neil, 1996).

metaphysically real and recognizable in the world—to ground reasons for protecting nature. Such an approach is difficult to sustain in practice because one cannot point to 'value.' Different people, communities, animals, and organisms have widely different intuitions about such value and though some single definitive value may be out there, it seems unlikely that anyone will be able to simply argue for it rigorously enough to convince all relevant parties of any one view. Because of this practical problem, I present obligations-based ethics as an alternative approach.

Over the next three chapters, I introduce three primary cases that pose challenges for the value-centered position, and demonstrate the plausibility and strength of an obligations-centered alternative: wolf management outside of Denali National Park, the proposed Susitna Dam in Alaska, and protection of the hoodoo rock formations in Goblin Valley Utah.

In chapter three, I focus on one problem stemming from value-centered ethics and take up the case of wolf management in Denali, Alaska. Currently wolves that call Denali National Park home are actively hunted and trapped when they leave the Park boundaries. This case highlights one instantiation of the so-called 'Substitution Problem' because narrow conceptions of environmental value are being used as substitutes for the overall worth of the wolf. Anthropocentric, biocentric, and ecocentric views all provide reasons to protect these wolves, but the issue is how to adjudicate between these reasons and reasons against protection. The question is not who is correct, but rather what is reasonable. Conservation in this sense must be based on reason and not absolutist identification of value. Ultimately, I argue that we ought to provide greater protection for the wolf because of the responsibility for them that we as a

society have taken up, and not because of one type of ecological value alone; this obligations-centered approach avoids the problem of priority.

Chapter four takes up the case of the Susitna-Watana Dam, a hydroelectric project currently in the planning stages. The dam site is in the middle of an Alaskan wilderness and could potentially have large impacts on the local salmon population. It would also provide a tremendous amount of energy for the state. I consider whether or not salmon are a good reason not to dam, and if so, why. If value in such a case is reduced to one truth, and conservation requires the protection of such value then a 'preservation problem' arises when such value appears to be either substitutable or unprotectable. Conservation requires engaging in messy compromise, addressing complex issues, and acknowledging non-substitutable but not definable values. Some obligations (namely social obligations) require open and honest discourse and collective decision-making. I argue that building the dam may be ethically problematic but salmon alone do not make this case; while looking to specific intrinsic environmental values will rarely make such a case, the obligation we have to one another and to the environment around us provide ample reasons not to pursue such disruptive development.

In chapter five, I discuss the deliberate toppling of a hoodoo in Goblin Valley State Park, Utah. A group of men intentionally knocked over this geologic feature and faced criminal charges and widespread social scorn. The feature, however, had little effect on the surrounding ecosystem or any living organisms. Environmental ethics is not ecological ethics; it is more expansive. Value forces the fetishization of certain attributes and elements, like life, trophic interactions, biodiversity, or ecosystem function, at the potential expense of others, like

preference, social responsibility, beauty, or history. Obligations already ground many practices for the protection of nature (i.e. national parks, vandalism laws, trespass), thus avoiding this problem. For environmental ethics to provide guidance it must look at the nature and implementation of such obligations.

Each of these cases illustrates an array of conservation challenges. Each also, however, gives valuable insight into one challenge for environmental ethics in grounding conservation: can current popular environmental axiology explain, defend, and help guide conservation practice? As is the nature of applied ethics, no case fits like a glove, and no one case would adequately demonstrate the breadth of conservation ethics I would like to consider. In taking on three cases, I am able to show the differences, problems, and potentials in value-centered and obligation centered ethics across the nature conservation world.

In an effort to understand the competing conceptions of value and problems that derive from the value-centered and obligation-centered perspectives, I will draw on Integral Ecology and Environmental Pragmatism to better illustrate what is left out when narrow conceptions of value over take the environmental discourse. While not explicit, these approaches to environmental problem solving have grounded my approach and can hopefully be seen in my analysis and case discussion. In looking for a more comprehensive ethic of conservation, I turn to the obligations approach because it holds intuitive appeal and practical solutions. Such approaches have been needlessly overlooked or underplayed in environmental ethics, and while methodological approaches have sought to move past problems of value, there is still a need for a more inclusive ethic, rather than moving forward by including environmental ethics as one facet of a larger solution metric.

My final chapter offers my conclusions and expands upon the obligations-based ethics that I build in the preceding chapters. Environmental ethics has overwhelmingly focused on the defense and definition of intrinsic value in nature at the peril of its own usefulness. Contractualism, discourse ethics, and neoKantian ethical theory all provide a rich obligation-centered orientation that avoids the intractability of value by preventing axiological disagreement from derailing ethical prescriptions.

Throughout this dissertation I lean heavily on the methods of philosophy. I use several thought experiments similar to how *Phil* began this chapter. While hypothetical situations like *Phil* are uncommon in environmental studies, they are accepted tools in the world of ethics (for example, Dennett, 2013). I will introduce other methods as needed, but generally have echoed the approach of philosophical ethics. I would however also like to make it clear that this is not a work of pure philosophy. My intention is to use ethics and philosophical thinking to bridge a gap between theory and practice. I proceed with philosophy as a guide within this work of environmental ethics.

CHAPTER ONE:

WHY PROTECT NATURE? VALUE IN CONSERVATION HISTORY AND ORIENTATION

Chapter One

Why Protect Nature? Value in Conservation History and Orientation

"A conservationist is one who is humbly aware that with each stroke [of the axe] he is writing his signature on the face of the land."

-Aldo Leopold

Introduction

The protection of species, landscapes, and resources in nature is more important than ever in today's world (Primack, et al., 2001). Wild animals and open landscapes have nurtured humanity throughout our history on this planet, but increasing demands on the natural world due to a growing, globalizing, and advancing human society have made the conservation of the natural world a top environmental priority (Gamborg, et al, 2012). We increasingly depend upon, draw from, and impact land, sea, fish, and flower. Efforts to use and develop nature wisely and to protect critical aspects of the natural world like species and ecosystems have all fallen under the vast and vacillating umbrella of aims and efforts we call 'conservation.' Because of the breadth within modern conservation, unpacking the norms that ground conservation, as well as defining conservation goals and strategies is not only complex, but also a task intimately tied up the success of conservation—call this the 'conservation conversation'. This discourse has largely developed through more specific or disciplinary aspects of a larger conversation, through for example environmental policy, conservation biology, environmental ethics, advocacy, and so on. But the interconnection and engagement of many perspectives aims at setting conservation goals. Looking at this broadest of conversations demonstrates

shared normative assumptions. Environmental value has offered an easy access point for dissecting the normativity of conservation, but value, often taken for granted, need not be hitched to what we ought to do.

In this chapter, I review relevant background and history in conservation practice, American environmentalism, and the norms that govern differing conservation perspectives. The implicit environmental ethic within the conservation conversation has suggested that environmental value is objective, discoverable, definable, and the moral impetus for protecting nature. However, most conservation conflicts come out of disagreements about environmental value. I argue that many conservation goals are grounded in problematic assumptions about environmental value. Debates over value are often tied to an understanding that what we ought to do in nature is protect environmental value, but by separating these conversations we can understand conservation ethics to be prescriptive without requiring value agreement. In light of this, I introduce a thesis that environmental value theory is inspiring but intractable, something I will defend in later chapters.

This chapter proceeds in three sections. In section one, I discuss the current conservation conversation from an ecological perspective, highlighting the normative perspectives within this conversation. Section one establishes a thread that weaves together the normative perspective behind the following sections. The conservation context and discourse is changing without an explicit shift in axiology. In section two, I review conservation as an idea from an historical and descriptive perspective. This will provide needed context for understanding where the norms in our conservation discourse have come from. Finally, in section three, I dissect the norms grounding the conservation

conversation and show the implicit value-centered ethic entrenched in the conservation world. While a rich discourse concerning these value structures within environmental ethics has aimed to explain and defend conservation from a philosophical perspective, this chapter looks at conservation from an historical and ecological perspective to investigate the way in which values underpin conservation discourse. Chapter two will turn to the philosophical conversation surrounding the conservation of nature.

I.I Shifting Ends in the Conservation World

Though 'conservation' refers to a wide range of activities, orientations, and goals, the primary ethic of conservation has sought to promote and protect value in the natural world (Redford, K. H., et al., 2003; Katz and Oechsli, 1993). Let us call this the first normative principle of conservation. Conservation of any kind can be seen as a response to the perceived overreach of human impact. Conservation therefore necessarily involves judgment and assessment of human activity and states of the environment. Intrinsic value in the natural world is taken for granted for the same reasons Sylan used the Last Man Argument, it intuitively explains and simply describes a conservation imperative. "The starting point of nature conservation is that nature is valuable and worthy of protection, preservation, restoration, and even development" (Swart, van der Windt, Keulartz, 2001, p.231). However, looking to value has offered a crutch.

If protecting value in nature is why we ought to protect nature, then conservation necessitates an understanding of environmental value regardless of what that understanding is. With this in mind, consider the following:

The truffula tree is critically endangered. The tree fetches a high dollar, provides jobs for truffula harvesters, and has unique properties as a commodity for human use. It also provides critical habitat to the endangered rodent-like barba-loot and holds untold ecological importance as the mainstay species of regional old growth forests. It is also magnificent, beautiful, rich with local history, and alive.

We could aim to save the native truffula stands, save the truffula industry, save truffula trees in new novel locations, save the bar-ba-loot and other aspects of the ecosystem without the truffula, or let the truffula trees and their ecological communities fade from memory.

Take two possibilities:

- 1. If the conservation paradigm used prioritizes protecting nature for its own sake, then the intrinsic value of the tree and the interests of the ecological community would give reason and direction to any conservation effort.

 Perhaps then we save old growth truffula groves.
- 2. If instead, ecosystem services, human use, and economic value are emphasized in our conservation goals perhaps we save novel truffula stands, monocultures, and function over form.

In both cases the truffula tree is boiled down to what it is worth. This value might be in and of itself important, prudentially important for the ecosystem, or

valuable to people, but in any case, protecting the truffula grove is motivated by the protection of truffula value out there in the grove. This approach is not a problem in principle, but as I will show it is a problem in practice. Either approach is open to disagreement that requires the demonstration of and agreement on specific value.

Conservation fundamentally rests on some set of norms that suggest we ought to protect the natural world or aspects of it like the truffula tree; because of this, in addition to the ecological sciences necessary to understand conservation questions, social values and ethics underlay our protection of nature (Jax and Rossi, 2004). Conservation directly affects people, conservation practices reflect and emerge from conflicting social interests, and conservation directly reflects our moral attitudes on and relation ship with the non-human world (Jax and Rossi, 2004; Alcorn, 1991; Callicott and Nelson, 1998). Moreover, conservation conflicts fundamentally involve the conflict of different normative agendas because conservation policy and practice are grounded in different value structures concerning nature (Norton, 1984). Within environmental ethics as an academic discipline most concerned with conservation reject pragmatic, anthropocentric, and proceduralist approaches, by grounding conservation in the protection of *intrinsic* value out of fears that without value inherent to nature that is unique and objective, we may use value to justify destroying nature (Elliot, 1997).

Many of the concepts called to work in the conservation discourse—biological diversity, ecosystem services, sustainability, ecological restoration, ecological integrity, intervention, ecosystem health—are part of a normative conservation concept that is "nakedly value laden" (Callicott, Crowder, and

Mumford, 2001). With this in mind, many values—anthropocentric, ecocentric, or otherwise—are often called upon as fundamental to conservation efforts in any given context, regardless of the orientation or framing of conservation used. This makes the definition and discovery of value the primary normative root beneath most conservation debates. One example can be seen in conservation biology. Arguably since the rise of conservation biology, a primary goal of conservation efforts has been the promotion of biodiversity (Soule, 1985; Callicott, Crowder, and Mumford, 2001).

The stated organization values of the Society for Conservation Biology are as follows (http://conbio.org/about-scb/who-we-are/):

- There is intrinsic value in the natural diversity of organisms, the complexity of ecological systems, and the resilience created by evolutionary processes.
- 2. Human-caused extinctions and the destruction and loss of function of natural ecosystems are unacceptable.
- 3. Maintaining and restoring biological diversity are individual and collective responsibilities of humans.
- 4. Science is critical for understanding how the natural world operates and how human actions affect nature.
- Collaboration among scientists, managers, and policy-makers is vital to incorporate high-quality science into policies and management decisions affecting biological diversity.

If #3 rests on #1 and #2, then this list strongly suggests a holistic ecocentric view—understanding ecological collectives as the scale on which environmental ethics ought to consider nature—a position long defended in conservation biology. For example, Michael Soule defends ecocentric holism as the distinguishing principle of the field (Soule, 1985). A corresponding ecocentric value theory understands ecosystem level attributes of the natural world like natural species diversity or historic composition as ends in themselves. "The principal intellectual challenge raised by such an ideal for conservation biology is the development of criteria of ecological health and integrity in an inherently dynamic, evolving, and human-saturated biota" (Callicott, 1990). Because of this, value in nature has often been reduced to criteria or constituents of an ecosystem, like life, rarity, trophic function, or charisma. While ethicists and environmentalists alike have offered several ways of explaining, bounding, and defining value in the natural world, the ethical conversation has not significantly developed past the explaination of ecocentric axiologies and general ecocentric ethical orientations, despite the emergence of a new conservation discourse. The problem here is not in emphasizing the importance of biodiversity, but in not challenging the normative assumption of prioritizing biodiversity by defining (constraining) its worth.

Because conservation efforts aim towards an end, and not just a process, conservation in practice is a goal-oriented pursuit (at times, conservation is itself a goal) (Soule, 1985). The mission of conservation has both a tangible descriptive aspect, but also a normative aspect. As we have seen, with the changing climate of environmental concern so too have the goals of conservation shifted. "Although many basic conservation principles, conservation organizations, and

initiatives of global reach and impact have persisted almost unchanged for decades, the framing and purpose of conservation has shifted," (Mace, 2014). The normative dimension of conservation is not static. With shifting ends, we can see shifting norms.

Georgina Mace offers four major "orientations," beholden to different normative agendas that can be used to understand the shifting normative agendas within the conservation conversation. She argues that initially, in the 1960s and 1970s, conservation was framed as a pursuit of "nature for itself," focusing on wilderness, preservation, and species. Next Mace suggests that in the 1980s and 1990s there was a shift towards conservation framing environmental concern as a fight for "nature despite people," focusing on extinctions, habitat, loss, and over exploitation of ecosystems.

Mace argues that conservation shifted again in the early 2000s to frame issues economically and focus on ecosystem services (Mace, 2014). Finally, Mace argues that today conservation has shifted yet again in light of global environmental change to take up issues of resilience, adaptation and the social ecological interface (Mace, 2014). This latest shift has largely come on the heels of a major shift in ecological thinking and a major recognition of realistic constraints on conservation goals.

Ecological sciences long understood nature as static, evolving through the 20th century to understand ecosystems as a system in balance, and only in the last 20 years replacing this understanding of balance with an understanding of ecosystem dynamics as a flux of many possible states based on many possible variables (Pickett and Ostfield, 1995; Hobbs, et al, 2010). Along with our new dynamic ecological understanding has come a rejection of many long held

'value' goals like naturalness, and a new interest in uncertainty and the management of disturbed systems (Cole and Young, 2012). The new evolution of this last conservation orientation is what has been the source of recent debate butting heads with the ecocentric perspective popular in conservation biology (which I will discuss shortly),

While the first three conservation framings have somewhat clear and discrete foci, this recent shift is far more multidimensional, integral, and difficult to conceptualize. Perhaps because of this difficulty, there are a myriad of novel approaches to conservation that have recently garnered support, focusing on the dynamic possibilities within an ecosystem, future uncertainty, and living with disturbance (Hobbs, et al. 2010). For example, recognizing problems specifically with appealing to history for determining conservation goals has motivated one growing shift in the conservation community. Responding to "rapid environmental change," as well the acceptance that conservation cannot practically, "remove all non-native species from ecosystems," many have looked to examining and accepting certain 'novel' ecosystems (Hobbs, Higgs, and Harris, 2009, p.602). The novel ecosystems approach does not aim to suggest that all ecosystems are lost to some artificial state, but rather demonstrates how novel components help bolster certain ecosystems, and how a change in the ecology and physical background of some environments requires a more nuanced examination of conservation options that traditionally considered (Hobbs, Higgs, and Harris, 2009).

"Intervention Ecology" has, in a similar vein, sought to shift the efforts of restoration towards more contextually sensitive, ahistorical, ends.

Acknowledging the need to focus on "an uncertain past and on a more uncertain

future," intervention ecology has suggested that in contrast to restoration, forward looking conservation can respond to environmental degradation without the epistemic problems caused by highlighting and aspiring to baseline environmental states for conservation (Hobbs, et al., 2011, p.444). This approach contends that, "a categorization based on intention forces a clear consideration of goals up front, rather than action based on preconceptions or a failure to clarify and agree on goals at all," (Hobbs, et al., 2011, p.445).

The background impetus for such large shifts away from orthodoxy in conservation biology could be seen as a result of mounting issues of how to conserve nature in the so-called anthropocene (Caro, et al., 2011).

Conservationists worry that, "if no ecosystem is intact, governments can more easily argue, and societies concur, that land use ranging from subsistence farming to extensive resource extraction is acceptable because the environment has already been degraded," (Caro, et al., 2011, p.2). Though some, in response, feel that this ought to motivate us to preserve local baselines for conservation, and protect remaining intact ecosystems, others have argued that such baseline problems could be avoided by an obligations-based ethic, more on this to come (Lee, et al., 2014).

The intuitive appeal for using value as the reason to protect nature has long been hallmark within the conservation community (Vucetich, Bruskotter, and Nelson, 2014). More recently some in the conservation community have defended conservations aim against a move towards anthropocentrism (as some have worried is implied by novel ecosystems management), suggesting that in the face of novel challenges we ought to save nature for a range of reasons including nature for nature's sake (Doak, et. al, 2014).

The reemergence of an ecocentric perspective has come up against a suite of voices responding to a growing concern over the breadth of anthropogenic environmental change (and the anthropocene). Because of the greater scope and new face of conservation in light of global environmental change, some have called for a greater focus on human oriented values to motivate and direct conservation efforts (Marris, 2011; Karieva, et al., 2007; Karieva, et al. 2011). Many have suggested embracing an evolution towards conserving novel, dynamic, uncertain ecosystems more simply because human disturbance is inescapable (Aplet and Cole, 2010). Some have also sought to build inclusive frameworks to help adjudicate the question of how to value nature, balancing the ecological, social, and aesthetic aspects of the natural world (Swartvan der Windt, Keulartz, 2001).

While all these views fundamentally conflict in many ways, they also share an underlying premise: the conservation context is shifting. "Conservation policies and strategies cannot stand still or dwell in the past" (Doak et al., 2014). The same could be said for how environmental ethics supports, justifies, and elucidates conservation. The expanding conservation conversation shows a need for a symmetrical expansion of our conservation ethics conversation. While this has begun¹⁰, it is often implicit or separate, and much more is left to say before environmental ethics catches up with the discourse in ecology and conservation biology, as well as within the broader environmentalist community.

It may be true that "[i]n recent years, some conservation biologists and conservation organizations have sought to refocus the field of conservation

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¹⁰ For example, see the work of Benjamin Hale, Andrew Light, or Allen Thompson.

biology by de-emphasizing the goal of protecting nature for its own sake in favor of protecting the environment for its benefits to humans" (Doak et al., 2013; p.1). However, because there has been an asymmetrical conversation about why we ought to protect nature, the normative groundwork beneath this discourse has not been challenged. The great normative assumption in new perspectives as well as with the old views they aims to critique rely on a belief that *either* human values and moral considerability are why we should protect nature or intrinsic value is why we should protect nature. These options were highlighted by the two possible views on the truffula tree. Both approaches, however, assume that protecting nature consists of protecting value in nature. The debate over prioritizing intrinsic worth of one kind or another, or demonstrating instrumental value has sidelined the greater normative conversation on what role value should play in why we ultimately ought to protect nature in the first place, the assumption being that defining value ought to play the central role in conservation ethics. In the words of John Vucetich and Michael Nelson, "That conservation has an ethical foundation is widely appreciated. Less appreciated is the shambled condition of that ethical foundation," (Vucetich and Nelson, 2013).

While others have recognized how a new look at the norms governing conservation ends could be useful, any approach that redefines environmental value does not buck the normative assumption that agreement on objective value is hitched to what we ought to do. These new perspectives recognize a normative problem with value-centered conservation ethics in that they aim to avoid a heavy handed focus on certain types of value as necessary for conservation to succeed. But beyond this sensitivity, the normative foundation of such approaches still rely on the determination of specific (new or other) value as

motivating for conservation. So, while changes in the conservation conversation offer new approaches to new problems, a deeper look at how conservation norms came into play and how environmental value factors into why we ought to protect nature can open more doors and illuminate more pathways to success. Though an explicit conservation conversation is relatively new, protecting the natural world is not.

I.II A Brief History of the Protection of Nature in American Thought

The assumption that value is at the root of why we ought to protect nature runs deep. Value-centered ethics embedded in conservation goals of today come out of the norms associated with the human-nature relationship. Looking at the greater context of environmental thought elucidates the emergence of such norms and normative debate in conservation as it currently stands. So what is the historical context of how we in the United States¹¹ protect nature? How have we understood this prerogative in the past?

One narrative understanding the rise of American Environmentalism suggests the earliest Europeans to reach the Americas feared the wilderness (Cronon, 1996). Nature, in this narrative—that great uncivilized monster of Thomas Hobbes and Plato before him, full of wolves and bears and wild men—was to be conquered. This puritanical view motivated the early rise of our *Republic*, a haven of control separate from nature. However, as our country grew

¹¹ I focus on this story from a western perspective within the American context for the sake of simplicity. This is not a piece of geography or history. I only aim to give some context, though I recognize this story, as I tell it here, is grossly incomplete.

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from colony and settlement into its infancy as an autonomous land, holding fast to ideas of manifest destiny, liberty, and a new American democracy, a Lockean relationship with nature emerged (Cronon, 1996; also see Tocqueville, 2003). The land was not only to be tamed, but also to be used. Nature became the place to unpack our unbridled potential energy. Men pushed west. They cut, and mined, and built railroads, and farms, and began to close the frontier.¹²

Something remarkable emerged from the adolescent expansion of the United States: conservation of the natural world. Our country began to set aside lands to be held as protected commons. As Emerson wrote in his 1836 essay *Nature*, "The lover of nature is he whose inward and outward senses are still truly adjusted to each other; who has retained the spirit of infancy even into the era of manhood" (Emerson, 1957). The early and mid 19th century saw the rise of this 'age of man,' whereby technology, population, exploration, and innovation saw a social shift where the natural environment became viewed as unique, either because of its resources, opportunities, or (as Jean-Jacques Rousseau suggested) contrast to early modernity. This spirit became essential to the American identity, and nature became part of this uniquely American identity (Nash, 1965).

Though conservation did not look like what it does today, protection of the natural world in the United States emerged from use and disturbance of the natural world. As the frontier began to close, Thoreau famously proclaimed, "in wildness is the preservation of the world," (Thoreau, 1862). Before the 20th century biotic fetishization central to modern environmentalism took hold, even

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¹² I am moving quite quickly here because this story is not new, having become a popular understanding of American environmentalism within environmental studies.

a staunch preservationist like John Muir saw the human relationship garnered from wild land as essential to protecting it, "thousands of tired, nerve-shaken, over civilized people are beginning to find out that going into the mountains is going home; that wilderness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life" (Muir, 1901). Muir and others tied the protection of nature and its resources to the interconnection of humanity and the natural world, suggesting a conservation end not in nature, but in society.

Thoreau preached interacting with nature as a means to get away from society, but also as a way to better understand society and the dangers of over-civilization (Thoreau, 2000). John Muir took the transcendentalist ethic of Thoreau (and Emerson) and opened it up to the American public, valuing nature as allowing for the rejuvenation of the human spirit (Muir, 1894).

On one hand, the American transcendentalists express the emergence of intrinsic value within the conservation discourse. They responded to the Lockean view of nature, which in many ways reduced nature to the value of its constituent parts. So long as society defines values in nature it is not a stretch to see how many early environmentalists called for the inclusion of intrinsic value into the collective calculus.

On the other hand however, the earliest parks, preserves, and protections for the natural world did not conserve nature for its own sake. Intrinsic value was a response to and push back against the Lockean utility view that pushed frontiersmen West, but that value was hardly concrete and was not alone responsible for the beginning of the environmental movement. Instead, as a

social collective we took on special responsibility for certain places, like National Parks, at times without specific acute threats arising to specific foci of value.

The early era of land protections following the romantic notions of nature popularized by the Transcendentalists was in part a reaction to the loss of the frontier and a fear that such wild places could be ruined, but it also expresses a patriotic sense of self. The landscape, wildlife, and ecosystems of our "home on the range" became seen as fundamentally "American" (Cronon, 1996). The value of nature to many became detached from what it could do for us. In many ways this opened the door for what Georgina Mace describes as the first framing of conservation in the 1960s, 'nature for nature's sake' (Mace, 2014). This is quite different from conservation today that may emphasize saving nature for its own sake. Today, most projects in protecting the environment are a response to an acute fear over the specific loss or reduction of intrinsic value in the form of, say an endangered species, or biodiversity hotspot, or old growth forest, or historical composition of a place. While each of these kinds of concerns may have crept up over conservations long and evolving history, coinciding with Mace's "conservation orientations," today conservation has the great challenge of juggling them in concert, something that challenges the normative foundation of any one conservation paradigm (Mace, 2014).

New normative agendas shift the ends of conservation, but not the ethical mechanism by which we conserve. Recent shifts in ecology away from backwards looking and value-centered conservation (such as restoration or strict preservation) towards practices like intervention, assisted adaptation, and ecosystem services, reflect pragmatic, justificatory, and deliberative practices. However, grounding the call for these shifts in either intrinsic value or use

values undermines the great contribution such novel ideas could make to the ethical dimension of conservation. As I will discuss, a robust obligations-based approach to conservation—focusing on the obligations and restrictions we have regarding nature rather than on the value of nature—could help describe and defend such approaches.

Obligations-centered ethics have deep roots in ethical theory, though these perspectives are perhaps underrepresented in the current environmental ethics discourse. The origins of environmental protection in North America both helps explain the emergence of value as a motivator for protecting nature while at the same time also providing one example of an alternative perspective. The rising popularity of new ways to manage the environment in ecology (from intervention, to re-wilding, to novel ecosystems management) provides another. Chapter two continues this thought by offering a more precise philosophical look at how environmental ethics runs into trouble by focusing on value, and how obligations could be seen to ground such past and future alternatives.

I.III Reasons for Protecting Nature in the Conservation Conversation

The conservation conversation of today, as well as much of our historical relationship with nature, has largely asked what we should protect in the natural world and how we should do so, but originally set out asking a different question: why ought we protect nature? This pushes the conservation discourse further from the social, ecological, and historical realms into the philosophical realm. Michael P. Nelson, in *An Amalgamation of Wilderness Preservation*Arguments—an article written for his (along with J. Baird Callicott) anthology on

the wilderness debate—put together an overview and critique of the many primary arguments in favor of *wilderness* preservation (Callicott and Nelson, 1999). Without defense, they are as follows (Nelson, 1999):

- 1. The Natural Resources Argument Resources abound in our wild places
- 2. *The Hunting Argument* Wilderness provides prime hunting opportunities.
- 3. *The Pharmacopoeia Argument* The medicinal uses of nature abounds.
- *4. The Service Argument* Ecosystem services require wilderness.
- 5. *The Life-Support Argument* As interconnected systems, wilderness areas support human areas.
- 6. The Physical Therapy Argument Wilderness provides wonderful experiences that enhance human health.
- 7. The Arena Argument Wilderness provides a stage for human exploit.
- 8. The Mental Therapy Argument A certain solace can only be found in wild places.
- 9. The art Gallery Argument Wilderness is nature's art gallery.
- 10. The Inspiration Argument Wilderness provides wonderful inspiration for human arts and innovation.
- 11. The Cathedral Argument Wilderness offers a space of true spirituality.
- 12. *The Laboratory Argument* Wilderness provides a space for scientific discovery and exploration.
- 13. The Standard Of Land Health Argument Wilderness offers a standard from which ecological health can be judged.
- 14. The Storage Silo Argument Wilderness provides a great store of genetic material, biodiversity, and more.
- 15. *The Classroom Argument* Wilderness is a great space for learning.
- 16. The Ontogeny Argument Homo sapiens are deeply entrenched in certain natural environments.
- 17. *The Cultural Diversity Argument* Specific cultures derive from specific environments.
- 18. The National Character Argument Wilderness is part of the American Identity.
- 19. *The Self-Realization Argument* Wilderness experiences provide a chance for self-realization.
- 20. *The Disease Sequestration Argument* Wilderness helps keep many viruses and bacteria at bay.
- 21. The Salvation Of Freedom Argument Wilderness is a stark contrast to society, the last hold out of true freedom.
- 22. *The Mythopoeic Argument* Wilderness is necessary for understanding history and creating the needed myths of the future.
- 23. *The Necessity Argument* Culture needs wilderness.
- 24. *The Defense Of Democracy Argument* Wilderness promotes the greatest good.
- 25. The Social Bonding Argument Wilderness provides a place of social connection.

- 26. The Animal Welfare Argument Wilderness is necessary for many animal communities to thrive.
- 27. *The Gaia Hypothesis Argument* We ought not kill our great mother earth.
- 28. *The Future Generations Argument* We owe it to the future to leave them what we have.
- 29. The Unknown And Indirect Benefits Argument Perhaps there is much we don't know, let us preserve wilderness in case it is in our benefit.
- 30. The Intrinsic Value Argument Wilderness ought to be saved for its own sake.

Interestingly enough, most of the arguments he reviews are fundamentally anthropocentric. Only arguments 16, 26, 27, and 30 are necessarily non-anthropocentric. Yet biodiversity, ecological health, and species protection remain the focus of most of the discourse in conservation. This is where environmental ethics is behind the eight ball. As Nelson says while setting about his taxonomy, "backpackers to bureaucrats, Romantics to rednecks, socialists to suburbanites, historians to hunters, philosophers to philanthropists, people have sung the praises of areas which they assumed to exist in their 'pristine state'..." (Nelson, 1999, p.154). Concern for the natural world is far broader than the ethical conversation surrounding it.

Nelson, drawing from a wilderness debate perspective, has drawn out a legion of reasons for protecting nature. However, few philosophers in environmental ethics venture past discussion of the arguments above, and fewer still in conservation venture past appeal to biodiversity or ecological health (Callicott, Crowder, and Mumford, 1999). Because of this, the reorientation of conservation has largely focused on a simple shift away from anthropocentrism and the problem of degradation is often seen as value based, with a technical solution. But ecologists are not necessarily well suited to deal with all reasons for preservation, such as the argument from the "Defense of Democracy." So, while

environmental ethics has built a rich rejection of anthropocentrism and defense of intrinsic value, a much larger incorporation of other ethics into the conservation conversation could help move many of the arguments above from social talking points to powerful punches.

The assumption that value itself motivates its own protection may compel many, but is only one possible stance to motivate protections for the natural world. Others have argued that environmentalism, as a modern movement, needs to ditch its divisive ecocentric ideology, a sentiment seen in much of the controversial work on conservation in the anthropocene (Nordhaus and Shellenberger, 2007). Because the ecocentric approach argues from a position fundamentally outside of our political structures, such an approach impedes win-win development-protection compromises. The ecocentric politics of mainstream environmentalism, combined with the restriction of the conservation conversation largely to ecocentrism (perhaps with a splash of biocentrism and prudential arguments) have divided and stagnated environmental protection efforts.

Much ink has been spilt defending the application of value theories to nature, but environmental axiology leaves out the messy compromises that make up real world conservation efforts. We have imperfect knowledge, we cannot foresee all consequences of our action, we manage nature for consumption as well as recreation as well as protection. Mounting challenges, from the anthropocene, 'end of nature,' and exotic species, to novel ecosystems, artificial landscapes, pursuance of de-extinctions, and a plethora of other novel problems, possibilities, and approaches not thought possible a short time ago have all

motivated an extensive discourse outside of environmental ethics over the goals and mandates conservation ought to pursue (as I have just discussed).

The division of academic labor has separated much of the theoretical work on intrinsic value and ethics from work on conservation. I have only shown a diversity in historical orientations and modern approaches to conservation. Chapter two continues this conversation to show hoe environmental philosophy has focused on the value-centered assumption of some conservation orientations without developing alternative theoretical tools. Differing ethical views can ground value differently, but often define nature in terms of its value (whether intrinsic, provisional, or otherwise), such that protecting nature is protecting value. In light of this, as the next chapter will show, environmental ethics of the past century (particularly academic environmental ethics) has focused overwhelmingly on locating value and considerability in the natural world to promote environmentalist goals. This has been a response to the value-centered requirements of conservation in practice. While intuitively appealing from an environmentalist standpoint, attributional and reducible ideals rely too much on woolly concepts of what matters and why. If value is thought of realistically, that is to say that value is something really out there, it may inspire, while also struggling to motivate. 13

Any such definition will constrict value to narrowly focus on only one of several perspectives.¹⁴ The conservation discourse demonstrates diversity in

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¹³ I do not intend to be using 'motivate' here with any particular philosophical rigor. Rather, I mean to use it colloquially in reference to stimulating enthusiasm and action.

¹⁴ As I will discuss, Integral Ecology provides a framework for understanding how such limited scope fails to solve conservation conflicts, and an obligations approach can serve as a

understanding how conservation ought to proceed, but not in why. Without a symmetrical ethical discourse many of the underlying questions at play have not been teased out. While some have sought to answer this call (see for instance Thompson, 2014 or Light, 2002), ethical assumptions persist.

The practices, goals, and orientations of conservation covers a broad and multifaceted spectrum, with a broad and diverse history. The U.S. congress established Yellowstone National Park in 1872, establishing the world's first National Park, to protect and preserve a landscape and ecosystem for the public. Since 1979 the International Whaling Commission has upheld an international ban on commercial whaling in an effort to save a dwindling population of the world's largest marine mammals. North America's largest land bird, the California condor, went extinct in the wild in 1987, since then a large-scale reintroduction effort has aimed at re-establishing this iconic bird in the American Southwest. Each of these represents a facet of conservation, the wide-ranging effort to protect the natural world. 'Conservation' was once held as a management regime in strict contrast to 'preservation'. Championed by forester Gifford Pinchot in the early 20th century, conservation was largely associated with a doctrine of 'wise use' of our natural resources. Today, environmental conservation has come to include many other facets of environmental protection. Whether reactive or proactive, whether focused on species, individuals, landscapes, uses, or resources, conservation has come to refer generally to the management, orientation, and goals of environmental protection, repair, and replenishment, with a particular focus on resource use (i.e. sustainability or

bridge between a widening conservation discourse and environmental ethics. More on this to come.

resource conservation), biodiversity (i.e. conservation biology or wildlife conservation), and landscape protection (i.e. landscape conservation, preservation, or wilderness protection).

So how can we protect the truffula tree for lots of reasons? How can we protect economic and intrinsic value? How can our conservation ethic cohere to multiple perspective and comprehensive understanding? In practice we do this through discourse, deliberation in the policy process, and broad-spectrum information gathering leading to agreed upon behavioral constraints and active restoration efforts. Protecting nature requires action, intention, and direction. But until the normative foundation of our conservation orientation has the capacity for integrating multifaceted values it will not be as effective as possible. The normative assumption that value is why we ought to protect nature leaves conservation susceptible to intractable value disagreement, because using value alone to motivate conservation, we have built an ethic that requires agreement on what matters and why, something that is a tall order in the real world. This perspective has dominated the conservation world, and as I will show, is also responsible for many challenges in protecting nature.

CHAPTER TWO:

WHY PROTECT NATURE? THE LIMITATIONS OF ENVIRONMENTAL VALUE FOR CONSERVATION

Chapter Two

Why Protect Nature? Environmental Value and Environmental Obligations

"When [man] first said to the sheep, 'the pelt which you wear was given to you by nature not for your own use, but for mine' and took it from the sheep to wear it himself, he became aware of a prerogative which...he enjoyed over all the animals; and he now no longer regarded them as fellow creatures, but as means and instruments to be used at will for the attainment of whatever ends he pleased."

-Immanuel Kant

Introduction

Environmental ethics, as a field of applied philosophy, seeks to apply, extend, and developed ethical tools and philosophical reasoning to environmental problem solving. In the past, environmental ethics has been substantially involved and embedded in the discourse around classic conservation issues such as extinction, restoration, or strict preservation (Callicott, 1990). Much writing in environmental ethics has sought to defend nature against a perceived disregard for the natural world, and establish environmental values, or extending moral consideration to the natural world (in any number of ways) often based on those values; the project of determining value and moral considerability is not just unresolved, but (like many great philosophical debates) it is inconclusive (Thompson and Norton, 2014). While many likely agree that at least some portions of nature ought to be valued, we simply cannot agree on specifically why or how, and in the real world there is a struggle to integrate competing perspectives on value.

For example, John Vucitech and Michael Nelson identify three pressing questions for more fully developing a conservation ethic:

- 1. What is population viability and ecosystem health?
- 2. How does conservation relate to and sometimes conflict with other legitimate values in life, such as social justice, human liberty, and concern for welfare of individuals, nonhuman animals? How should we resolve such conflicts?
- 3. Do populations and ecosystems deserve direct moral consideration? (Vucitech and Nelson, 2013, p.10)

Most will agree there are prudential reasons for providing a certain level of environmental quality—breathing clean air, drinking clean water, food, recreation, ecosystem services—but most would also agree that constraining environmental protection at such a level neglects a great deal of what matters in nature. Answering Vucitech's and Nelson's questions may have once seemed simple, but the current climate within conservation is simply less conducive to the value-centered environmental ethic that motivated earlier waves of environmentalism and environmental protection. Perhaps nature is a nucleus of real value that we only need recognize, but if the demonstration of such value fails to be adequately convincing, which has generally been the case in the broader public environmental discourse, we are left without a useful tool to aid in the understanding environmental problems (O'Neill, 1997). We have a greater vocabulary with which to debate environmental value, but this approach does not readily assist real world conservation conflicts move forward (Light, 2002).

This chapter builds upon the analysis in chapter one to show that value has done too much work in the conservation discourse. While chapter one took up the conservation conversation and drew out the argument and ethics for

protecting nature to make this case, this chapter delves more specifically into the ethics literature to see how a focus on value has dominated the ethics conversation. While environmental ethics has built strong arguments for why we ought to protect nature, these arguments have also created division and abstraction that makes the tools of environmental ethics intractable in the real world. This chapter reviews environmental ethics, introduces the obligationscentered approach, and also introduces integral ecology as a framework for understanding the deficiency of our value accounting and condition for building a comprehensive understanding of the normativity guiding conservation. I argue that leaning on value has been an oversight within the field and that obligation-centered ethics offer an alternative perspective.

I further aim to defend the position that while environmental axiology has structuralized many environmentalist intuitions—describing environmental value in an environmentally appealing way—and ignited environmentalist passions, environmental value in the real world cannot be reduced or defined so easily. While many environmentalists appeal emotionally to intrinsic value or pragmatically to instrumental values, a plethora of reasons and arguments support preservation of the natural world. Obligations-based ethics bring together competing environmental values in a manner that is both theoretically appealing and practically applicable.

This chapter proceeds in three sections. First I review the conservation conversation from within environmental ethics. This is where many strong ideas have forwarded the value-centered approach, but overlooked obligations as an alternative. Next I introduce obligations from a philosophical standpoint. I will demonstrate the practicality and plausibility of obligations-centered ethics

through my case studies in later chapters, but here I lay the theoretical groundwork. Finally, I review Integral Ecology as a unique framework for incorporating multiple perspectives in a pragmatic way to build solutions to environmental problems in the real world. In later chapters, I will use Integral Ecology (at times explicitly and at times implicitly) to frame a series of case studies and show how narrowly defining value has constrained progress and prevented a comprehensive problem orientation.

II.I Environmental Ethics and its Focus on Value: The Other Conservation Conversation

It is a mistake to assume that there is only one conservation conversation. There are at least two: conservation biology, policy, and environmentalism have offered one such discourse and environmental ethics has offered a second. The first is a conversation about what we ought to do. The second is a metaconversation about how we've talked about what we ought to do and about why we ought to understand it in that way. By teasing apart these two conversations I intend to separate an axiological and ontological conversation about what has value from an ethical and rational conversation about what we ought to do. This second conversation has been largely confined to academic philosophical circles, but nevertheless has played a role in the formation of the wider conservation conversation. A broader look at environmental ethics as an academic pursuit will therefore help contextualize the first conservation discourse in relation to the second.

The tools available for applying ethics to conservation largely come out of this field. Environmental ethics is not just relevant to the conservation conversation because it has provided tools for understanding in the past, but it is the most likely area of environmental scholarship able to fill in a growing normative gap moving forward. Environmental ethics aims to understand and describe a moral relationship extended to the non-human world. It attempts to use the philosophical approach to build ethical prescriptions and diagnoses in response to human-environment interactions and conflicts. In this effort, environmental ethics often both deconstructs the normative dimensions of human-environmental interactions (whether it be policies, politics, disturbances, or experiences), and applies more traditional philosophy and ethical theory to the environmental realm. Though there is debate about what counts as 'environmental ethics'—the application of ethical theory to the environment, the construction of a uniquely environmental ethic, or the extension of norms in light of environmental concern the environmental prescriptive. As such, it offers a language for guiding action.

Too many environmentalist assumptions rooting action in value have been taken for granted, leading to a major area of ethical theory—obligations—being largely left out of the environmental discourse. Environmental ethics in this current academic form has only been explicitly pursued as a focus within applied philosophy for roughly the past forty years, its inception largely coinciding with the environmental movement of the early 1970s (Light and Rolston, 2007). Its roots however, extend much further back into the very

¹⁷ Personally I see it as a combination of all three.

¹⁵ Because of this, I hope my investigation can be understood as constructively critical, and not derisive

¹⁶ While this may seem inappropriately rudimentary, situating this work in environmental studies and not philosophy seemed to call for a quick overview of environmental ethics.

foundations of western philosophy. Historically, the environment and environmental entities have simply been a part of broader normative ethical theories, whether it be John Stuart Mills' position on animal rights, Thomas Hobbes' 'state of nature', or Aristotle's perfectionism. Much of environmental philosophy has aimed to amend a notion that extends all the way back to Plato's *Republic*, by which nature is viewed as the 'other' (Plato, 1997). Value has become the currency in the search for a unifying environmental ethic.

Like the public discussion of conservation, the subfield of environmental ethics has been largely devoted to questions of value and moral considerability in nature. In this way, environmental ethics has largely been a response to a worry that traditional anthropocentric ethics unfairly privileges humans and human interests, and is thus narrow. This is symmetrical to traditional approaches in conservation. Some may contend that without such narrow (generally ecocentric) approaches, conservation could not adequately account for environmental protection. Environmental ethicists have taken up the tasks of understanding what our morals ought to extend to, what has intrinsic value in the natural world, how these values ought to be preserved, restored, compared, and created, and how humans ought to view themselves within a world of natural value. Such concerns are in many ways non-environmental, but arise out of broader pursuits of ethics aiming to provide a vocabulary for describing actions and individuals as right or wrong, good or bad, or better or worse; one aspect of this is to look at how inclusive an ethical approach is (Light and Rolston, 2007). In this vein, the environment has been seen as a logical place to

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¹⁸ See Mill, 1979; Hobbes, 2010; Aristotle, 1999.

turn in assessing the completeness (or incompleteness) of an ethical theory, then amending it or building a new ethic in its place.

One of the first explicit expressions of moral extensionism¹⁹ in an environmentalist framework was Aldo Leopold's, *The Land Ethic* (Leopold, 1949). Leopold asked people to view their community in its broader ecological context, reliant on natural entities and processes. He claimed that the interdependence within an ecosystem provides the grounds for extending our moral consideration to the natural world. The Land Ethic organizes biotic interaction into a 'Land Pyramid. The Land forms the base and largest section. Building upon the land, primary producers form the next tier, and so on up through consumers to apex predators. Leopold aims to show through the Land Pyramid that each piece of the ecological puzzle is reliant on others at different levels and scales. He aimed to show that ecological function and composition holds moral value because of the interconnection and dependencies within the biotic community. This set the stage for other approaches to similar questions, such as the notable positions of Arne Naess, Paul Taylor, Holmes Roltson III, Rodrick Nash, Peter Singer, and others emerging with the academic discipline of environmental ethics.

A common intuition that nature ought to be protected sparked much of this conversation. Intrinsic value has in many ways been seen as a path to an ethic of protection (McShane, 2007). Holmes Rolston III, for example, largely began the conversation of how to 'naturalize value' (Rolston, 2001). Rolston's

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¹⁹ Moral extensionism is a general thought that we ought to evaluate the extent of what we, morally speaking, consider, and then extend our ethics to entities like plants, animals, and ecosystems, that are not traditionally thought of as ethically significant. It is often a term used to refer to traditional western ethical theories being extended to non traditional arenas, but is also used in reference to extending our ethical sphere with new non-traditional moral theories.

view rest on an axiological assumption that he shared with the broader conservation conversation—that intrinsic value is a metaphysically real and objective property, Rolston, who has been rightly called one of the fathers of environmental ethics, essentially argues that the fact-value distinction in nature relies incorrectly on an anthropic view of value in the natural world, whereby only human valuers can ascribe value. He argues that because nature is selfactualizing and because all life has prudential needs, living things have a good of their own, independent of human valuation (Rolston, 1989). This suggests that because things in nature have interests things in nature have value. Rolston's groundbreaking approach opened the door to a new understanding of environmental ethics. Rolston aims to replace a supernatural view of value with a natural view of value, whereby intrinsic value is real property of things in nature. While Rolston's project was incredibly novel and shifted the conversation to think critically about nature independently of our human perception, his view also helped begin a tradition of *realistic* environmental axiology that holds nature's intrinsic real value is out-there in the world recognizable by appeal to properties in nature. I do not intend to argue against such views, but rather look at implications of getting caught up in getting our axiology right. Rolston's view holds that natural selection and behavioral ecology supports natural goals that ground value out there in the world (Rolston, 1997). Others have made arguments that experiences or interconnections or dependencies make up value in the world that either must be considered consequentially or that demands certain rights. Such views have underpinned popular biocentric, and ecocentric views of the past 30 years, asking what has value and moral standing.

Pursuing questions of value in and considerability of nature, animals, and things in nature has proved worthwhile, setting the stage for many of the seminal debates in environmental ethics; but these approaches arose in response to certain environmental challenges and may be insufficient for dealing with many current aspects of environmental problems (particularly in conservation). For example, what should we do in the face of global scale environmental change when we have focused on describing the value of naturalness? For nearly two decades environmental thinkers have begun to describe this coming age of environmental change. Noted environmentalist Bill McKibben argues, in his well know work *The End of Nature*, that short of a fundamental shift in how humanity relates to nature, we will lose naturalness in the world (McKibben, 1989; Aplet and Cole, 2010). The 'anthropocene', the age of man, hosts a world in which humanity has had a hand, intentionally and unintentionally, in creating the global environment (Crutzen, 2002). Such novel ideas of nature pose a challenge for traditional environmental ethics similar to the challenge posed to conservation, because the world may lose what has in the past been thought of as natural value. Nature, from critters to plants to ecosystems, could be said to be in part an artifact of mankind. In response to global environmental change, many understandings of environmental value may struggle to appropriately describe this new nature.

Ultimately, much of environmental ethics has been concerned with locating value as out-there, somewhere to be found in the world, in things, and in attributes—again, what some call *value realism* (O'Neill, 1997). This third-personal perspective overlooks how most ethical issues seem to actually play out. Moral relationships, responses, and repairs, on this view, look to a list of

values, considerations, and rights that float around in the world. Apart from a practical concern over the interrelational nature of many moral claims, the theoretical backbone of such value-laden approaches must overcome both a practical problem as well as a theoretical challenge presented by the arbitrariness and mysticism associated with such value. Problems of value identification, aggregation, degree, agreement, and commensurability abound. Additionally, such views struggle to account for the role of moral agents play in adjudicating value. Our arbitration of morality is, on such accounts, held as separate from ethics itself (while such views also hold axiology as fundamental to ethics). This separation can be seen in the wariness most environmentalist maintain when considering anthropocentric views. Common environmental ethical approaches insist on searching for the *correct* non-anthropocentric equation for grounding environmental protections.

Peter Singer made the individualistic utilitarian view popular in the animal-rights world with his well-known work *Animal Liberation* (Singer, 1975). Consequentialism generally argues that actions can be judged based on the world states that an action brings about, and utilitarianism more specifically takes the position that value is a reflection of pleasure and pain. Singer thus argues that to be morally considerable something needs only the capacity for experiencing pleasure or pain. Using this argument, Singer has called for the inclusion of sentient life in our moral community (Singer, 1975).

Others have used similar consequentialist approaches to argue for the consideration of all natural entities. Gary Varner, in his work, *In Nature's Interests*, offers a desire satisfaction welfarist theory (Varner, 1998). Varner does not argue on strict utilitarian grounds, but instead suggests that wellbeing (and

hence as Rolston argues value) is derived from the satisfaction of one's interests. He then argues that all living things, not just sentient animals, ought to be considered morally because they have biological interests (similar to Rolston's view). Many other notable positions have similarly attempted to use individualistic consequentialism to ground environmental ethics, all using the promotion (and often the maximization) of value to motivate moral extension. At times the environmental application of consequentialism and other ethical views blurs lines between theories. Robin Attfield, for example, argues for a value maximizing ethic in *A Theory of Value and Obligation*, but departs from most consequentialists by presenting a perfectionist view of a value (whereby value is flourishing), more Aristotelian and virtue oriented in nature, than utilitarian (Attfield, 1983).

More generally, biocentric (grounding environmental ethics in the value of life) and ecocentric (grounding an ethics in the intrinsic value of holistic natural systems) approaches to environmental ethics have become widely popular as a means of extending consideration and valuation to nature. These views suggest scopes and foci for considerability and value. Biocentrists generally focus on the individual and on life, while ecocentrists generally focus on systems, communities, and function (Varner, 2002). Such approaches deliberately contrast with the anthropocentric ethics of the past.

While less prevalent (some might say antithetical) in the environmental realm, some have tried to bring anthropocentric or anthropogenic approaches back into the environmental discourse aiming to establish environmental concern from either the instrumental value nature and the environment has for people, or from the value that humans perceive in it, because grounding environmental

ethics in instrumental value underpins perhaps most environmental policy (Palmer, 2003). The explication of this type of anthropocentrism can be seen, for example, within discussions of sustainable development, where unsustainability motivates resource protection. Others, such as John Passmore in *Man's Responsibility for Nature*, have suggested considering an anthropocentric approach out of skepticism over the grounds by which intrinsic natural value could be established (Passmore, 1974). In addition, some like Eugene Hargrove have argues for 'weak anthropocentrism,' by which anthropocentric value is not intrinsic but merely subject to human perception (anthropogenic) and centered around humanity.

Anthropocentric approaches like these have been widely criticized as being anti environmental and/or unfairly privileging of humans (see for example, Donald Scherer on 'sustainable resource ethics,' or Peter Singer on 'Speciesism'). Rolston notably put this debate in axiological terms, in his well-known work *Environmental Ethics: Duties to and Value in the Natural World*, arguingthat value is "in as well as of nature" (Rolston, 1988, p.203). Paving the way for the biocentrists and ecocentrist of today, his and similar views have largely responded to a concern over the separation of humans and human ethics from nature. While this concern may be founded, a jump to defending value-realism has in some way muddled the project of ethics in the environmental realm. A third-personal account of intrinsic value may in fact further the separation that those like Rolston seek to dissolve specifically because it disconnects such value from humanity. Grounding ethics in an attributional view of value—one reliant on specifying an attribute like life, ecosystem function, or species diversity as the source of value—fails to capture the unique

and nuanced relationship that humans have with the natural world. While environmentalists often like to suggest that we are 'in' nature, persons also have a unique agency. Many approaches to value and extensionism, however, focus on highly contentious attribute identification rather than on the moral force of our agency.

Neo-Aristotelianism has been used as a basis for understanding environmental problems. Generally, virtue based ethics look to develop internal worth through recognition and care for what matters in the world. Proponents of such approaches often see value as the development of perfection in any individual relative to some ideal (for example, see Philippa Foot on 'natural goodness', or works by Allen Thompson and John Basl). While few describe virtue approaches as being directly concerned with value, a virtue lens looks to understand what *in our relationship* to the natural world is worthwhile. Using traditional virtue of character offers one alternative to value-based ethics, because normativity is ascribed to us as agents (i.e. Sandler, 2006); and an adaptive understanding of perfectionism has provided another (i.e. Foot, 2001; and work by Allen Thompson). The focus of virtue ethics is not the assessment of actions, but the assessment of character. So, while these approaches are not just plausible but cogent alternative understandings of environmental ethics, they struggle to guide action. Kantianism (which does have its proponents—see for example works by Benjamin Hale) offers yet another still lesser considered approach, and value-centric ethics are still center stage.

Kantian ethics, when called into action in environmental ethics, has been largely reduced to simple rights-based deontology (ignoring its obligations-based counterpart and contractualist branch). Social contract theory, arguably the

forth-major branch of ethical theory, has been left out of the conversation (with a few exceptions). Paul Taylor has famously argued that intrinsic value has a teleological basis in all living things that demands respect (Taylor, 1986). Kenneth Goodpaster, Tom Regan²⁰, Albert Schweitzer and others have all had similar views of life or living things being worthy of rights, respect, reverence, or other grounds for deontological consideration rooted in rights stemming from the inherent value of so-called moral patients. Such views express many aspects of popular non-environmental patient-centered (rights-based) deontology (Goodpaster, 1978; Regan, 1974; Schweitzer, 1989).

Often, assignment of blame, liability, and responsibility has struggled to deal with large scale, diffuse action (collective action problems), a hallmark issue of global environmental change, but also smaller conservation issues.

Furthermore, many traditional, value-based approaches assume that nature, species, wildness, and other aspects of the environment are defined by their ontology (for example, Elliot, 1997). Analogously, conservation has indeed often aimed at reconstructing historical baselines, or maintaining analogue environments; such goals offer a real problem when environments are understood as impacted by humans (Lee, Hermans, and Hale, 2014; Caro et al., 2012).

In response to the individualistic focus common in ethics, many environmental philosophers have also aimed at developing holistic approaches that locate value in process, emergent phenomena, systems, integrity, stability,

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²⁰ I also mention Singer. Many would hold animal ethics as a distinct arena from environmental ethics. While there are many conflicts and concerns in marrying the two, both animal and environmental ethics aim to understand ethics in dealing with nature (including species), so I am lumping them together. Feel free to object.

and cooperation rather than in individuals. Many such views follow in the earlier Land Ethic tradition of Aldo Leopold (see Callicott, for instance). These views are often expressed through debates over environmental goals (as well as management practices). For example, Eric Katz has notably argued for focusing on the welfare of ecosystems and ecological communities, rather than on individuals (Katz, 2000).²¹ Other views, such as Deep Ecology and Ecofeminism, aim to change our perspective to be more perceptive, unbiased, and inclusive. These views, however, offer general methodologies and orientation, not straightforward normative prescriptions (Naess, 1973; Warren, 1997).

"The central and most recalcitrant problem for environmental ethics is the problem of constructing an adequate theory of intrinsic value for nonhuman natural entities and for nature as a whole" (Callicott, 1985, p. 257). Despite the diversity of ethical theories concerning the environment—from Leopold to Rolston to Regan to Callicott—most share a common premise: the way to defend environmental concern is to find value and extend moral consideration to things in nature. This task heavily relies on nailing down answers to questions of value that have been debated for millennia. Because of this, responsibilities for morally reparative actions like restoration, or precautionary actions like preservation, are often predicated on commensurability or reconstructibility of value, both of

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²¹ The discourse on obligations to future generations or sustainable development (Hardin, Parfit, Pojman in Pojman, 2006) has often appealed to non-environmental ethics, grounding environmental issues in there effect on people. This may provide another example of alternative environmental views. Arguments for sustainability or future generations often ask us to fix our gaze further down the line and not be short sighted. While arguments in such a vein are very useful and illuminating, their scope may me too narrow to explain or defend broader environmental concerns. They involve environmental issues, but I do not think are real approaches to an environmental ethic, for this reason I will not take a close look at such approaches here.

which are fraught with debate. Furthermore, such a premise implicitly restricts the very project of normative ethics, whether deontological, utilitarian, or Aristotelian, to be about value calculus. Approaches such as environmental pragmatism and pluralism have aimed to overcome this very issue (see for example Katz and Light, 2013). These views offer a road map to action and results, but I believe that further development of underlying ethical theory could help compliment these approaches. The emphasis of value identification in this respect is not just a constraint but also a great deficit in the discourse, as well as central to the shared assumption in both conservation conversations: that we need to understand and define value to protect nature.

All of this makes applying environmental ethics to our current challenges of conservation extremely difficult. The problem is two-fold. First is a pragmatic but significant issue. Any theory reliant on value realism must move forward without being able to show the values that it espouses. This challenge is not one of presenting a convincing argument for ecocentrism or biocentrism or any other specific approach, but rather the fact that such approaches must rely on argument alone. We can argue about the value of intact ecosystems or life or riparian habitat or banana slugs until we are blue in the face and still not get every relevant party on board because such value is intangible.

Secondly, there is a real theoretical problem. Stopping the buck of value at any particular set of conditions, components, or attributes (what I call attributional theories of value) may naturalize value by drawing it out of observations of the natural world, but such a view must defend itself against any other position on the matter. This makes any specific theory in danger of appearing theoretically arbitrary or mystical, recognizing value in this but not

that, and relying on a conception of value simply emerging either out of thin air, or out of our anthropogenic valuation. Singer has identified sentience; Varner has identified life; Rolston picks natural selection; Callicott has identified ecological roles. It is hard to wade through the metaethics of alternative positions. The one size fits all reductionism in many theories of environmental value makes narrowly appealing to particular value tough to swallow, "an attempt to treat humans and rose bushes in identical ways—provided we could imagine what threat would involve—would not succeed in helping us become more intelligible to ourselves" (Altshuler, 2013, p.435).

If the answer to why we ought to protect nature rests in wooly value-centered reasoning, then it seems the environmental cause may either fail to garner active enthusiasm, or fail to move past infighting over priorities, and in both cases set the stage for different sides of conservation questions to talk past each other in normative discussions. Simply put, a focus on any specific axiology is always narrow. By focusing on certain ideas of value we ignore legitimate concerns and alternative paths to problem solving. By looking to avoid the narrowness of traditional anthropocentric ethics, we have simply adopted a range of non-anthropocentric, but equally narrow, alternatives. Integrating the many understandings of value and perspective on what matters in nature can avoid problems of such narrowness.

Beyond this, the recent shift in conservation orientation within the conservation biology, policy, and environmentalist discourse has not been accompanied by a symmetrical philosophical investigation, leaving normative presuppositions legion. While some have begun to push for this new

conversation, old questions still consume most of the oxygen in the field. This is not a weakness of environmental ethics, but an opportunity.

II.II Obligations-Centered Ethics as an Alternative to Value

In response to a perceived social acceptance of the degradation and exploitation of nature, John Passmore wrote, "What if anything is wrong with this attitude? There are two different ways of trying to answer these questions; we can think of wilderness and of species as having either a purely instrumental or an intrinsic value. On the first view, wilderness and species ought to be preserved only if, and in so far as, they are useful to man. On the second view, they ought to be preserved even if their continued existence were demonstrably harmful to human interests" (Passmore, 1974, p.101). This represents the traditional position of dichotomy taken up in environmental ethics of the latter half of the 20th century, occupying the bulk of the conservation ethics conversation as I have now discussed.

When Passmore wrote his breakthrough book, *Man's Responsibility for Nature*, this way of thinking was not just novel, but truly exceptional, as thinkers like Passmore tried to take the works of pioneering environmental heroes like Aldo Leopold or John Muir and interpret their call for moral extensionism in more philosophically technical terms (Passmore, 1974). The problem with this approach is not that is theoretically unfounded; on the contrary, environmental axiology has expanded our social consciousness with regards to our interactions with the natural world tremendously. Rather, a growing complexity in environmental problems, as well as more than four decades of modern

conservation to draw from, has brought to light a few major problems with approaching environmental protection from this basic value dichotomy and value-centric reasoning. "The profound and increasing pressures on our natural systems demand that conservationists critically review their goals and approaches and seek ever more effective ways of improving the outlook for all natural ecosystems" (Doak et al., 2014). Critical to reviewing goals is a review of what motivates those goals and what work those goals do. When the Bengal Tiger kills dozens of people in India every year, how do we reasonably ask people to save it? When disparate effects of climate change are reshaping habitat, or when novel ecosystems have established themselves from century old management practices, how do we understand collective responsibility and forward looking conservation?

Recognizing the hurdles of realistic environmental axiology and aiming to forge an alternative path forward, Onora O'Neill has proposed that an obligations-based approach to reasoning about environmental issues may better serve our environmental goals (O'Neil, 1997, p. 128). She suggests that the environmental community, particularly within environmental ethics, has focused discussion around utilitarian-based and rights-based reasoning, concerning the issues of intrinsic value, moral considerability, and environmental rights.

O'Neill's position is that an emphasis instead on obligations may establish stronger reasons for protecting the natural world (O'Neill, 1997).

On O'Neill's view, the great challenge facing common value theory in the environmental discussion is the assertion of some metaphysical realism. O'Neill claims that ecocentric ethics, "ostensibly puts real values, among them real environmental values, first, so is able both to underpin appeals for animal rights

or liberation, and to support wider ethical claims of 'deep' or radical ecology" (O'Neill, 1997, p.128). O'Neill supports the notion that any biocentric or ecocentric view of natural value makes an objective claim about what kind of value is out there. We have a strong reason not to rely on just value, because of the metaphysical challenge in demonstrating such value. That is to say, proving the truth of any one theory of value is theoretically over-demanding and practically infeasible. This is not to suggest such value is not necessarily out there, but rather to point out that without a robust demonstration of such values existence, appealing to such value will get us nowhere in the pursuance of environmental goals. Because of the practical hurdle, O'Neill claims we have a reason to move towards an alternative view, because of the theoretically hurdle, obligations offer such an alternative (O'Neill, 1997, p.128).

In an effort to provide a path forward for 'non-realistic' environmental value, O'Neill suggests that many practical and structural advantages can be found in basing an act-oriented environmental ethic specifically in obligations rather than rights. Because obligations do not fall victim to the many critiques over anthropocentrism that rights do (like speciesism) because, as she claims, obligations reorient the conversation from entitlement and beneficiary to action and agent (O'Neill, 1997, p.133). Her position structures obligations as basic. This "switch of perspective from recipience to action," pulls the conversation of what we ought to do away from a conversation about axiology (O'Neill, 1997, p.133).

If obligations are to do any real work independent from environmental value directing obligations, we will need to distinguish obligations-centered reasoning from other similar approaches, like rights-based reasoning. Any obligations approach will be in some sense deontological, but one might think

that this would align such approach with other popular deontological ethics in the environmental discourse. Animal and environmental rights have been the most common expression of deontological reasoning in environmental ethics, however, if such rights are founded in value or problematic anthropocentrism, they will fall victim to the same problems as a value-centric approach. Rights are often at the center of popular questions of moral standing, making rights-based reasoning question the ontology of the rights holder. Rights based ethics may seem to offer an alternative to value-centered ethics because of the nonconsequentialist proposition in rights. For example, Martha Nussbaum has famously critiqued using cost-benefit analysis as the deciding factor in environmental management because, as she says, rights are of a different kind than value (Nussbaum, 2000). However, rights may not avoid many of the pitfalls facing value-centered ethics. For example, because rights are fundamentally patient-centered—that is to say that a right is a claim held by a moral patient—rights look a lot like a valuable state, experience, attribute, or quality of a patient. Rights-based reasoning makes attributes of a thing the determination of its moral value, just as do value-centric approaches. Perhaps incommensurable with other values, and perhaps holding lexical priority over other values, it is unclear if a rights based approach is really new. Agent-centered obligations—focusing on duties and responsibilities taken on by moral agents offer a truly different perspective.

A neo-Kantian alternative to tight-based reasoning would be to approach the question of status (and action) as an agent-centered deontological question of consideration²² (Hale, 2011). This obligations-oriented approach moves past problems with not just value, but also environmental rights: "the great advantage of rights-based ethics is that it is so beautifully adapted to making claims; its great disadvantage is that these claims can be made with flourish and bravado while leaving it wholly obscure who, if anyone, has a duty or obligation to meet them" (O'Neill, 1997, p.132). Suppose, for example, we take a *respect for life* approach to environmental ethics. While being alive may grant something moral standing, or establish its intrinsic value, it is not clear how I ought to respect that without an understanding of my agent-centered obligation towards that life; this is the argument for an agent-centered understanding of moral status (Hale, 2011). After all, "proclaiming rights is all too easy, taking them seriously is another matter, and they are not taken seriously unless the corollary obligations are identified and taken seriously" (O'Neill, 1997, p.132).

II.III The Nature of Obligations

The nature of obligations has not been widely considered in the environmental field beyond its basic distinction, but ethical theorists from the neo-Kantian perspective have taken up the task as it concerns morality more broadly. Christine Korsgaard has argued that our subjective rationality is the basis for moral obligations. Because we hold ourselves at 'reflective distance' from our actions, we appeal to reasons. "When you deliberate, it is as if there

²² I do not mean to open up this discussion of obligation to the considerability can of worms; a full discussion of the issue of considerability would be well beyond the scope of this project. It is also a question that I feel has been beaten into the ground deep enough that one has to get quite dirty to play with it.

were something over and above all of your desires, something which is you, and which chooses which desire to act on. This means that the principle or law by which you determine your actions is one that you regard as being expressive of yourself. To identify with such a principle or way of choosing is to be, in St. Paul's famous phrase, a law to yourself" (Korsgaard, 1996, p.100). Korsgaard sees justification to other members of the moral community establishing obligations-based reasoning because such justificatory reasons are already imbedded in ethical norms (Korsgaard, 1996). As a neo-Kantian, one could interpret this to be Korsgaard's understanding of what it is to be a 'legislating member of the kingdom of ends.'

Korsgaard also makes a needed distinction between obligation *to*, where obligations have direct subjects, and obligations *with regard to*, where it may be the case that the subject of an obligation dictates further subjects of obligations-based reasons (Korsgaard, 1996). This opens the door to broad obligations-based reasons that concerns subjects in the natural world without a need to rigorously defend an extentionist ethic. Roman Altshuler for instance, has suggested that our "duty to humanity grounds our duties to the non-human world" (Altshuler, 2013). On his view, we have an obligation with regards to the similarities we see in non-human nature and humans. He claims that direct obligations to humans thus establish strong indirect, morally significant concern towards nature.

Stephen Darwall has taken up the position that, while our subjective experience of agency may establish our need for reasons, such moral obligations are fundamentally "second-personal" in nature. He understands obligations to be an intersubjective process, claiming that a second-personal reason is "one whose validity depends upon presupposed authority and accountability

relations between persons and, therefore, on the possibility of the reason being addressed person-to-person within these relations" (Darwall, 2009, p.137). On Darwall's view obligations concerning nature relate fundamentally to the extent to which our reasons for pursuing some environmental damage or protection can be justified from the second-personal standpoint to other relevant individuals (Darwall, 2006).

With this in mind, consider our protection of great works of art. The laws and moral conventions protecting the *Mona Lisa* derive not from the painting itself, but from the justification of human reasons for protecting the painting. The aesthetic preferences, heritage, and interests of people compel other people to behave so as to protect the painting. This means that the moral restriction on our behavior against defacing the *Mona Lisa* is not actually intended to protect the painting in itself, but only the painting as a vehicle for those preferences, heritage and interests of people. I do not owe anything to the *Mona Lisa*, but to you with regards to the *Mona Lisa* (Korsgaard, 2008).

This idea fails to cohere to a major environmentalist intuition, that protecting nature may only have to do with nature. Kantian ethics has developed a rich theory of obligations as part of a reciprocal normative relationship between persons. So to Kant an obligation stems from normative claims that we can only make if we as rational agents view ourselves as bound by common normative laws. Such laws necessarily stem from rationality, and such a relationship of obligation derives from respect for the rational choice of others. The ends we pursue are justified by the (hypothetical) acceptance of our reasons by other rational beings (Kant, 1983). This is why Kant famously viewed animals as a means to human ends and perhaps why Kantian obligations have not been

widely considered as plausible for an environmental ethic. However, even Kant thought that cruelty to animals had to be justified in terms of human ends, "violent and cruel treatment of animals is ... intimately opposed to a human being's duty to himself...; for it dulls his shared feeling of their suffering and so weakens and gradually uproots a natural disposition that is very serviceable to morality in one's relations with other people" (Kant, 1997, p.212). The same approach could be taken to our handling of ecosystems or the environment at large, but if obligations to protect the natural world can be reduced to obligations to one another as persons, then such obligations are indirect, prudential imperatives that do not reflect that feeling that nature itself is sometimes worth protecting.

Well, there are two ways to proceed from this perspective. Firstly, from a practical stance, the fact that an obligations-centered view cannot account for nature as an end in itself does not necessarily matter. An obligation to a person that demands certain behavior towards the natural world and an obligation to the natural world that demands the same behavior may invoke different emotional reactions, but pragmatically calls for the same behavior. So from a second-personal standpoint, if degrading nature is not justified, or if there are strong reasons in favor of protecting nature, than an interpersonal relationship is practically successful at motivating protection. Nature is not the direct subject of obligation on such account, but nature is nonetheless the impetus for and focus of obligations.

Committing to anthropocentrism, however, is a very large bullet to bite. So, given the primacy of an environmentalist belief that we ought to protect nature itself categorically, we must look for a way around Kant's position if obligations are to offer an alternative ethic, our second path forward. While Kant holds that duties and claims must be reciprocal—if I have an obligation you must be able to make a claim against me—if we look at the basis for such a position we see that many types of obligation may be able to substantively include the natural world.

If obligations are the result of a normative relationship, as Kant,

Korsgaard, and Darwall suggest, then mutually acceptable reason could establish
normative law that extends beyond the relationship of one rational agent to
another. If we take Darwall's second-personal standpoint, for instance, then if
you and I both agree that we ought to protect endangered species, my obligation
to do so might stem from our reciprocal respect for each other's agency, but our
reason has established a normative law concerning endangered species for
themselves. That is to say, if we can justify a moral imperative to protect the king
salmon, say, then I owe it to you because of our moral relationship, but I also
owe it directly to the king salmon because moral reasoning has established
normativity in the salmon. The moral law brought through an intersubjective
process of justification and deliberation does not demonstrate value already out
there in the world, but rather it ratifies and confirms a normative perspective
through agreement. Ultimately an intersubjective Kantian ethic lets us confirm
positive reasons for moving forward with obligations to the salmon.

We establish normativity beyond the moral community by appeal to reasons that are ratified by the moral community. We might therefore have direct obligations to the natural world because of the establishment of non-reciprocal duties and responsibilities (Korsgaard, 1996). So unlike our obligation regarding

the protection of the *Mona Lisa*, when we establish a law to protect endangered species, we then owe it *to* the endangered species.

The adjudication of obligations-based reasons requires one further step. Both discourse ethics and modern variants of contractualism provide a theoretical chassis for bringing together members of the moral community in parsing out reasons as doing justificatory work. While these approaches are not overtly prescriptive, they provide theoretical but not structural guidance, they do suggest how to arbitrate between reasons within an obligations-based ethic. Discourse ethics, famously defended by Jürgen Habermas, places the justification of reasons and discharge of obligations within discursive evaluation (Habermas, 1991). A broad evaluative public, on this view, provides the key to determining whether responsibilities have been upheld and obligations honored. The reasonableness criterion purposed by modern contractualists, most notably T.M. Scanlon, provides further guidance on the matter. Scanlon proposes that an act is reasonable if no rational agent could reasonably reject the rationale for it (Scanlon, 1999). This intersubjective view provides the foundation for Scanlon's theory of "what we owe to one another."

Taking these approaches and applying them to the environment provides a means for taking obligations-based reasoning about environmental issues and using it as an alternative foundation for an applied environmental ethic. As I seek to break down the problems with realistic value-centered ethics in motivating conservation, I will draw on these many obligations-based views to construct what I see as a more inclusive, broadly applicable, and pragmatic theoretical foundation for conservation ethics.

Realistic approaches to value, particularly intrinsic value, present several conceptual hurdles that are beyond the scope of this project. I am only intending to show how such approaches may, in the words of O'Neill, "be difficult to sustain" (O'Neil, 1997, p.128). Because such approaches inspire, but have a hard time gaining traction on the ground, I hope to have shown that obligations provide a means for incorporating such values into an ethic without relying on the ardent establishment of such value. I see obligations-based reasoning, thus as the scaffolding for effective use of value-centric reasoning.

Many might think that an obligations-based approach must rely on value as a source of obligations. For example, Lilly-Marlene Russow has suggested that the three most common arguments in favor of an obligation to protect endangered species are our role as stewards, a species' extrinsic or provisional value, and a species' intrinsic value (Russow, 1981). Russow uses problems with each of these arguments to argue that we do not have species level obligations, but rather only obligations to individual members of a species (for aesthetic reasons). She suggests first that the call of stewardship as a source of obligation begs the question, because it does not address the ultimate issue of what has value, and what is therefore worthy of protection. Furthermore, Russow argues that extrinsic value can be provided by many means or is problematically anthropocentric. Finally, she argues that intrinsic value is messy because of the difficult questions it raises: how to base such value and then how to move forward with obligations demanded by such value? If a species, for instance, has intrinsic value, why not develop new species, or change our taxonomy to recognize more species? Both of which seem like ridiculous suggestions (Russow, 1981). While the debate between individualism and holism is beyond

the scope of this project, I do think that the challenges to value-based reasoning raised here are worth considering.

While agreeing with Russow's understanding of these value issues, I do not think that it means we must think strictly of obligations to individuals, but rather think more holistically about the nature of obligation. If obligations simply derive from the recognition of value, obligations-based reasoning may just be a different side of value-based reasoning. If, however, obligations derive from a justificatory imperative demanded by our agency, then this is a novel approach that rests importantly on distinguishing the ratification of value from the definition of value. As I have already explained, an interpersonal neo-Kantian understanding of obligation might establish normativity in the natural world, but is not hung up on locating realistic or intrinsic value, only agreeing upon the value that does justificatory work.

Obligations are fundamentally a debt. An obligations-based approach concerns what we as moral agents owe; this may be what we owe to each other, what we owe (directly or indirectly) to nature, ourselves, our society, and so on. Moreover, obligations arise from reasoning, justification, and our moral agency; because of this, an obligations-based ethic can integrate many theories and perspective of value as relevant considerations in a single theoretically robust approach. In order for me to proceed with this view, it is important simply to understand that I take obligations-based reasoning to be interpersonal, discursive, and justificatory. This is to say that by obligations I mean a commitment to the appeal to reason between relevant parties. Say, if you strongly believe that wolves are intrinsically valuable on a landscape and can

provide a defense of that belief, I ought to respect that perspective even if I do not agree so long as your reasons hold up.

A value-based approach hinges on your convincing me of the real value of the wolf that is out there; if you fail to prove this value, nothing follows. An obligations-based approach, however, would suggests that I have an obligation to you, possibly to the wolf, to engage with your perspective as part of body of reasons moving forward, regardless of our agreement on value. This issue could then turn from a matter of who is correct in their value calculus, or has correctly recognized value, to a matter of what commitments we must uphold and what we owe to each other. Obligations arise from reasoning, justification, and our moral agency; because of this an obligations-based ethic can integrate many theories of value, as relevant considerations, into a single theoretically robust approach.

CHAPTER THREE:

WHY NOT VALUE? DENALI WOLF MANAGEMENT AND THE SUBSTITUTION PROBLEM

Chapter Three

Why Not Value? Denali Wolf Management and the Substitution Problem

"I will take any liberty I want with facts as long as I don't trespass on the truth...We confuse facts with truth." -Farley Mowat

Introduction

The recent Wes Anderson film, *Fantastic Mr. Fox*, featured the wolf as the only animal not to wear clothes or speak. Even within Anderson's expose into the animal kingdom—telling the story of a fox family and their forest friends sparring with likes of three local farmers—the ethereal presence of the wolf represents the wild majestic state of nature. Wolves have taken on a certain social representation of *true* wildness. Wolves have not always embodied such lofty environmentalist ideals, and to many the grandma-eating monster of *Little Red Ridding Hood* threatens livelihood, competes for food, and pesters human neighbors.

This polarization rests on a fundamental difference in value claims. While ecological observation and understanding has symmetrically shifted over the past hundred years, the reason the *big bad wolf* persists as a worry for many is not just a misunderstanding of wolf ecology, but a critical difference in how certain people relate to wolves. Wolves are both a social mascot representing wildness, and apex predators sitting alongside us humans at the top of the biotic pyramid. A binary approach to our relationship with the wolf has lead to many conservation conflicts because the flagship representation wolves hold seems incompatible with conflicting views of wolves as a competitor or a theat. This

value dichotomy rests on a value-centered conservation ethic because each perspective supposes some metaphysical truth: either wolfs are valuable representations of the wild and ought to be protected, or wolves are simply getting in the way of human flourishing and ought to be killed. Ultimately then, this polarized view of wolf value makes wolf conservation a great place to look at problems stemming from value-centered ethics.

This chapter highlights one problem stemming from value-centrism in environmental ethics. The "Substitution Problem" arises when the value of something in nature can be reduced to a function, quality, or attribute of that thing, because it stands to reason that the maintenance of ecological value rests not with the protection of any particular thing, but only with those attributes, qualities, and functions (Katz, 1985; Hermans, et al., 2014). So, if we aim to save a species or an ecosystem and we define the value of that species or ecosystem based on any discrete criteria, we would be able to save the value of the species or ecosystem by only saving the criteria on which they are valuable. For example, if wolves are deemed valuable because of their predatory function within an ecosystem, then it would appear that no value would be lost with the extirpation of wolves so long as we control the population of prey species as wolves do. Such substitutions present a conceptual problem for conservation: if we accept that protecting discrete discoverable value is the goal of conservation, then we commit ourselves to accepting unintuitive, seemingly counterproductive ecological substitutions. The Substitution Problem also rests on a practical hurdle: if the value of something we want to protect in the natural world is reducible to the metaphysically real, then for one perspective on value to be correct, all other perspectives on value must be wrong. The theoretical problem

and practical hurdle presented by the Substitution Problem bolster rather than resolve conservation conflicts in the face of sharply contrasting perspectives on value. Wolves offer a hallmark case of contrast when it comes to assessing environmental value.

Today, the State of Alaska's wildlife managers and the National Park
Service disagree on weather wolves deserve protection along the northern
boundary of Denali National Park, a six million acre expanse in central Alaska.

Many conservationists are fighting for expanded wolf protection, while others
view wolves as dangerous competitors for big game and a consumptive resource
for hunting and trapping. Should wolves be protected for Park visitors or
hunters? The Substitution Problem here emerges from an assumption that
ecological value can survive the substitution of the wolf with wolf functions,
experiences, and other social, ecological, and experiential contributions of wolves
in the ecosystem.

This chapter demonstrates how environmental value is necessarily narrow when used as sole ethical reasoning for conservation. Value-centrism doesn't work in the real world, and can't account for the messy compromises necessary in ecological management. I also argue that the priorities of both the Alaska Department of Fish and Game and the National Park Service conflate discrete management goals with the value of conservation. Both groups seek to conserve the wolf by reducing its value to specific attributes, functions, and qualities. In making this argument, I show how value-centered conservation ethics leads to theoretical and practical problems. I do not intend to disprove any idea of environmental value or value of the wolf, but only show how problematic it can be to use specific value theories alone to guide action. Value-centered ethics

commits any practical approach to implicitly prioritize narrow aspects of the wolf-Denali ecosystem, leaving conservation there vulnerable to a substitution problem, whereby wolves could be replaced with careful human intervention that maintains the value of the wolf.

My discussion proceeds in three sections. Section one reviews the Denali wolf buffer debate. The State of Alaska currently faces a dilemma on whether or not to protect wolves in Denali because the state is largely guiding action on its assessment of environmental value. Section two presents the Substitution Problem as a substantive hurdle resulting from value-centered conservation ethics. Section three suggests a way to avoid the Substitution Problem through reorienting our conservation framing. Integral Ecology provides a framework for uniting multiple perspectives on the natural world (Esbjörn-Hargens and Zimmerman, 2009). Reviewing an integral approach to wolf management in Denali highlights the narrow focus that value-centric ethics has emphasized. Though not the focus of this chapter, using obligations-centered ethics to integrate competing values both avoids the Substitution Problem and provides a defense for Denali wolf conservation.

III.I A Wolf of a Problem

The Alaska Board of Game, a governor appointed committee in the 49th state, mandates the Alaska Department of Fish and Game (ADFG) to control predator populations (wolves and bears) in areas where doing so might increase ungulate populations for hunting. The Alaska Department of Fish and Game employs of number of techniques to carry out this mission, including direct

measures like areal gunning or indirect measures like allowing predator hunts and easing up on trapping regulations. On the northern boundary of Denali National Park questions of how wolves ought to be managed by the Department of Fish and Game have sparked controversy. Despite a requested moratorium on wolf hunting or trapping in the area just north of the Park by the Park Service and several local voices, the ADFG currently allows wolf take under its predator control mandate. Hunting outside of National Park boundaries implicitly targets Park animals because of known migration corridors, tracking programs, and geography.

Denali is the nation's third largest National Park. At over six million acres, this vast landscape encompasses a truly wild swath of central Alaska. Mountains, forests, tundra and animals like wolves living in the Alaska Range make Denali a geographically and ecologically diverse Park. Today, more than half a million people visit Denali every year, many making the long journey to the subarctic specifically to see Denali's wildlife, including wolves.

Denali National Park was originally founded with the goal of protecting the wildlife of the area. Wolves, however, were not initially included in this mandate of protection and predator control threatened to kill off Park wolves in the name of (other) wildlife protection. It was not until the 1940s and the resolute efforts by Adolph Murie and others that wolves were understood as not a threat to the ecosystem but as a necessary aspect of the ecosystem (Murie, 1934; Murie, 1944). Since then, wolves have been protected in their natural state inside the boundaries of the National Park in line with the Park's founding mission of wildlife preservation.

In an effort to better accomplish the Park's original mission to protect wildlife of the subarctic, its boundaries were expanded in 1980 to encompass the winter range and complete habitat of Park animals (Alaska National Interests Lands Conservation Act, Public Law 96-487, December 2, 1980). A sliver of private and state land to the north of the Park, known as the Stampede Corridor or Wolf Townships, was left out of this boundary extension. During Denali's harsh subarctic winters, many of the animals most visible along the Park Road, including several wolf packs, retreat to this lower and less mountainous area (Caribou leave the high tundra for the boreal forest, where they can more easily dig for winter forage and find sustenance in tree bark and lichens, the wolves follow close behind). There was originally a recommendation to eventually include the Stampede area through land swaps within the new Park boundaries, but the exclusion has taken on a more fixed nature over time, and such a swap is unlikely.

Stampede is surrounded by Denali National Park on three sides. Recognizing that hunting and trapping along this corridor was a potential threat to Park wolves, a buffer zone that excluded much of the area to hunting or trapping of wolves has been put in place by the State of Alaska at various times. However, in 2010, in contrast to the multiple new proposals to expand the buffer, the State removed the buffer entirely, opening up the area to hunting and trapping. Since then, the Park's wolf population and wolf viewing (the sightings of wolves) have significantly declined—with visitors seeing wolves dropping from 44% of visitors to 4% of visitors (Denali National Park Survey 1986-2015). There is an ongoing debate about whether or not the removal of the wolf buffer is to blame for this decline (Ballenberghe, 2015; Friedman, 2015). The loss of

wolves—the population down to an historic low—has led many (including the NPS) to adamantly push for the restoration of the buffer zone.

The question to be decided is whether or not wolves ought to be protected outside the Park. The Alaska Department of Fish and Game has called the management of Denali wolves an "allocation" issue. Framing the wolf buffer issue as that of allocation rather than management based on mandated goals like sustainable harvest hands the issue off to the Alaska Board of Game. This framing constrains the wolf question to the imbalance between environmental value and social value—a calculus of what wolves are worth. The ADFG sees a choice between providing wolves for hunters or wolves for visitors to the National Park: "The controversy regarding the so-called 'wolf buffer' is centered around the allocation of wolves between harvest through trapping and hunting and wildlife viewing opportunities for Park visitors" (Alaska Department of Fish and Game, Emergency Order no. 03-02-15). Framing the wolf buffer debate as an allocation issue assumes such values—consumptive and non-consumptive—are commensurable. To make a decision in such a case, the ADFG conducts wolf, caribou, and moose population viability assessments based on large game management unit (GMU) boundaries. These boundaries cover large areas. The ADFG manages at the GMU level, so large GMU area means the ADFG suffers from poor resolution in cases like the Stampede Corridor. The impact hunting has on the local Stampede area is averaged out with the ecological health of the larger GMU. While the GMU system is practical—in so large a state it is simply infeasible for the ADFG do different—large unit boundaries deemphasize observable local ecology in the debate in favor of subjective values.

The Alaska Department of Fish and Game has defined the issue in such a way that suggests we can decide whether wolves are worthwhile as an animal to be viewed by visitors or as an animal to be hunted and trapped for sport and sale—defining the value of the wolf as the value of uses for the wolf. By demanding a comparison of values to guide action on the wolf buffer, the ADFG assumes that such valuation is what ought to motivate our management actions. That is to say, we ought to protect or not protect the wolf because of whatever value of wolves is greatest. So a value-centered ethic implicitly guides the deciding perspective on the Denali wolf issue. Notice how in such a discourse, each value aims to delegitimize the other.

The Alaska Board of Game has final say on whether or not predator hunting and trapping ought to be allowed in this area and now faces a dilemma between providing for state managed hunting on state managed land or protecting an animal for visitation on federal land. Many conservationists, however, see the value of the wolf and an intact Denali ecosystem as more important than consumptive use outside the Park. If environmental ethics gives priority to one type of value or valuation concerning the wolf in how management of the wolves of Denali is judged, then the normative investigation of this complex multidimensional issue reduces to questions of what value is really there.

The heated debate concerning the Denali wolf buffer has led many to defend specific value ascribed to the wolf. Viewability and tourism have been touted by many conservationists as the essential value of Denali wolves (cited as the reason to protect wolves in nearly every public meeting, Park notice, newspaper article, and online blog on the issue) (Clynes, 2016; Van Ballenberghe,

2015; Friedman, 2015). More difficult to assess are aesthetic values, the integrity of the ecosystem, scientific history, and direct considerability of wolves. There is no easy way to compare the value of having an intact ecosystem with intact predator-prey relationships against the value of predator hunts and possibly greater ungulate densities for hunters (or the cultural history of wolf hunting and trapping). Such comparisons are not a matter of bringing out the scale and plopping various facts of value on each side. The Denali wolf management case illustrates how value-centered ethics struggle to provide non-reductive, cooperative options for real world conservation progress. Because both sides of debate cannot be right under the value-centered paradigm, compromise can never be win-win. In contrast, obligations-centered ethics uses differing values as reasons in a process of justification. In doing so, obligations-centered ethics provides a path forward in such complex conservation debates, as well as demonstrating why charisma, history, culture, and preference, along with ecological function, bio-diversity, and ecosystem health give conservation priority to certain animals like the wolf.

The Substitution Problem arises if the environmental value of the Denali ecosystem can survive without wolves (so long as their value is maintained), or substitute certain wolf values for others. A huge effort has been spent in environmental ethics to defend and describe which functions, attributes, or qualities ought to be considered as at the root of value. As I have already discussed, the list includes life, sentience, rationality, beauty, usefulness, and contribution to diversity, contribution to historic integrity, functionality, and a myriad of other characteristics. If such theories of value must either hierarchize or defend particular conservation goals against goals that might prioritize similar

or substitutable value based on such attributes, then there seems little hope for species protection.

The pessimistic conclusion of the Substitution Problem leaves no room for most ordinary intuition on protecting nature. An intuition that something is amiss here is why voices in the conservation aiming to reorient conservation towards a novel, perhaps more anthropocentrically sympathetic view of nature, are not moving the normative discussion forward, often beating their heads against a wall laid in the brick of realistic value-centered ethics. For example, Peter Karieva has suggested how scientists can help quantify trade offs between ecosystem services and resilience, shifting the conservation conversation from ecocentric intrinsic value to anthropocentric value, which does not alone change the underlying ethic dictating conservation action (Karieva, et al., 2007). It does not matter if you trade values so long as value is still narrowly motivating conservation. Why save the wolf for viewing and not use the wolf for hunting? Value-centered ethics requires these questions have discrete and narrow right answers, and problematically delegitimizes many conservation goals, ecological perspectives, potential compromises, and individual viewpoints. Whether we ought to save nature for its own sake or for the sake of other considerations, so long as our conservation framing requires that we save value, the norms behind conservation will breed disagreement.

III.II The Substitution Problem

As I have said, several practical and theoretical challenges face a valuecentered conservation ethic, many of which I touched upon in chapters one and two. An exhaustive discussion into each and every problem posed by guiding conservation action on an assertive realist environmental axiology would be beyond the scope of this problem. So, while other issues certainly arise with value-centered ethics, I am focusing this chapter on discussion one as an example: the 'Substitution Problem.' I have chosen to focus on the Substitution Problem because it poses common theoretical and practical concerns for moving forward with value-centered ethics as a normative foundation for conservation. I will explain the problem, show how it arises because of value-centered roots, and show how it might be avoided by an obligation-centered alternative. After investigating the problem theoretically I will turn back to the Wolf Buffer debate as an example of the Substitution Problem rearing its ugly head and preventing progress in the real world.

If wolves in Denali National Park ought to be protected for their viewability (say an aesthetic or experiential value) as many engaged in the Wolf Buffer Debate have argued, then consider the following:

Pet Wolf

With wild wolves extirpated from Denali, the National Park Service adopts a wolf pup and strategically releases it for a few hours a day to wonder within sight of Park visitors along the road.

Or instead, if wolves are valuable as a hunting resource, then consider the following:

Ranched Moose and Wolves

Hoping to maintain their lifestyle of wolf tapping and moose hunts, the residents of the Stampede Corridor collectively ranch wolves and moose, strategically releasing them for hunting season.

Though such substitutions present intuitively ridiculous solutions to the Wolf Buffer debate, a value-centered ethic requiring and real environmental value commits itself to consider such options.

If wolves only matter because of their value as predators, then we might instead just manage the populations of their prey (which we often do). If wolves are intrinsically valuable in their own right and that value can't be naturalized to properties in the wolf then conservationists face an impossible task of convincing most people in the rural West that they are wrong to kill wolves (a battle which has already been raging for more than half a century). A reductive universal understanding of environmental value pigeonholes environmental ethics into an un-useful role for real world ecological conflicts, but an obligations-centered ethic, an inclusive system of justification that takes multiple value orientations into account, provides real world, non-hypothetical normative guidance to conservation.

The Substitution Problem has most commonly been discussed in reference to ecological restoration. If the problem of environmental degradation rests in the loss of value (as Last Man Arguments like *Phil* might suggest), then substituting equivalent value would offer a path to restoration. Eric Katz has argued that this

position presents a problem because we cannot in fact ever replace lost value (Katz, 1985). In other work, I and others have suggested that the Substitution Problem arises from a functionlist view of nature—a common argument in environmental management that seeks to side step certain considerations in the natural world by approaching value of species as a matter of function (Hermans, et al, 2014). If the value of some aspect of an ecosystem can be assessed in reference to its function in that ecosystem, then it would appear nothing is wrong with replacing that component with a surrogate, so long as function (and therefore value) is maintained. This presents a problem for restoration: if an environment degraded by human actions can be 'fixed' by focusing solely on function, then a completely engineered artifact of human creation could stand in for the ecosystem in question, and perhaps even justify its degradation (so long as 'value' is maintained).

For example, due to deliberate extermination, Rocky Mountain National Park has lacked a resident wolf population since the mid 1930s. With wolves gone, an exploding elk population has ravaged many plant communities in the Park (Seager et al., 2013). In order to control this population of voracious ungulates, the National Park Service has employed a network of fences and targeted culling operations to mimic the ecological influence wolves once had on the elk population. The Park Service has stated elk restoration as an explicit management goal (NPS, 2007). Though many have presented evidence suggesting the importance predators play in the ecology of prey population, wolf reintroduction in Rocky Mountain National Park has so far been off the table. By suggesting that 'restoration' can occur for the elk population without its primary predator, the Park's managers are implicitly substituting the wolf for its function.

If indeed the value of the wolf is its function, than so be it; however, if this value extends beyond function, then the substitution problem ensues.

The Substitution Problem presents a hurdle for restoration because the problem proposes that we can restore by creating something entirely new and different, a proposition that most would agree misses the moral point of restoration. The restoration idea often aims to repair an ecosystem by putting back whatever value has been lost (Elliot, 1996). Elliot does not argue that replacing the lost value of an ecosystem would repair the ecosystem, but instead argues that if such a thesis were practically possible, then little would prevent doers of potential ecological harm from mucking up the environment so long as they restore that environment later. Such a pernicious outcome of the 'restoration' thesis' leads Elliot to distinguish between nature and artifacts. He claimed that the value of anything created by mankind was of a fundamentally different kind than—and therefore incommensurable with—value of nature. By distinguishing between natural and artificial value, Elliot maintains the Restoration Thesis, but defeats its pernicious outcome, since no intervention by humans could actually replace natural value. This leads Elliot to question whether or not the idea of restoration coheres. After all, if restoration justified degradation it would appear problematic, and if restoration cannot hope to ever replace lost value it would appear problematic (Elliot, 1996). But the problem is more broadly pervasive in conservation, because the 'lost good' concept of degradation is commonly seen as causally motivating forward-looking protective actions (for example in the climate change debate see Caney, 2006; Shue, 1999).

Elliot's concern could easily be expanded to conservation more broadly.

Consider a view of value concerning Denali's wolf population:

Fence

Hoping to maintain wolves roaming wild on the Denali landscape, the NPS builds a boundary wall around the Stampede Corridor, preventing migration of wolves and wolf prey into an area where they are susceptible to hunting.

This does not reduce the value of the wolf to its predatory function, but rather reduces the value of ecosystem to a composition and function that is independent of neighboring areas. This would be to apply a biocentric or ecocentric ethic to Denali as seen on a map, boundaries and all. But would this succeed in maintaining a wild population? If the value of the Denali wolves rests only in their presence or function in a place, then yes.

The Conservation Thesis (CT): We can (and ought to) protect nature by protecting value in nature (as discussed in chapter's one and two as the premise to value-centered ethics).

The CT is what I discussed in chapter one as the normative root of valuecentered conservation ethics. Such a thesis naturally requires an understanding of the value in nature, commonly leading to some idea of value realism, call this the 'value realism premise' (or VRP). The Value Realism Premise: We can identify value in attributes, qualities, function, or conditions.

Following from the CT and the VRP, it would seem that we could substitute values in nature according to certain attributes qualities and functions, and successfully protect the value in nature. Here the Substitution Problem pops up because conservation could then be achieved without nature itself being protected—a contradiction.

So the Substitution Problem starts to look like this:

- 1. We ought to protect nature to protect value in nature (the CT).
- 2. We can identify value in attributes, qualities, function, or conditions (the VRP)
- 3. Therefore, we can substitute those attributes qualities, functions, and conditions (in 2) that accord value and still preserve value (and protect nature).

Two likely concerns here might be that the above view unfairly expands a functionalist concern to other axiological positions, and that this problem can be avoided by denying the VRP without denying the CT. Firstly, I am not restricting this result to rest on a premise that reduces value to function, but rather on a premise that reduces value to anything that is particular (and therefore narrow). If one were a compositionalist, rather than a functionalist, we would see a symmetrical challenge where value could be maintained so long as composition

is maintained, but is a zoo featuring all plants and animals native to an ecosystem an example of the successful conservation of that ecosystem? I think not.

So, while a premise that places the value of a species in its function could supplant the broader VRP and lead to the Substitution Problem, *any* narrow assertive view of value would similarly lead to the same problem.

For example:

- 1. We ought to protect nature to protect value in nature (the CT).
- 2. The value of an ecosystem rests in an axiology that is biocentric, holistic, and prioritizes complexity (an assertive environmental axiology).
- 3. Therefore, we can substitute components and/or functions that promote biocentric value in nature and still maintain the value of an ecosystem.

Perhaps on such a view we could not replace wolves with fences and sharpshooters, but we might be able to justify introducing jackals in the wolves' stead, or perhaps we could construct a 'friendlier' alternate ecosystem, just as complex, but without contentious animals like the wolf.

On the second concern, Elliot's approach to this Substitution Problem might be to distinguish categories of value, as he did facing the problematic justification of the Restoration Thesis. Doing so would be to take on the VRP, but not the CT, and simply exchange the Substitution Problem for an even more grave practical problem of inaction.

Replacing the VRP on Elliot's view would be a premise that supposes intrinsic value is real, but incommensurable with other values, call this the 'Incommensurability Premise' (IP). But where would this leave us? Elliott ultimately says Restoration is impossible, should we similarly say Conservation is impossible? The VRP lead O'Neill to push for an obligations orientation because of a slue of practical and theoretical concerns. An axiology that requires incommensurability also prevents prioritization, and necessitates a robust metaphysical defense of value.

If rather than aiming to avoid the VRP or the IP, we instead provide an alternative to the CT, then neither the VRP nor the IP directly guide action and the Substitution Problem falls apart. The VRP only leads to the Substitution Problem, because value is action guiding under the CT. Similarly the IP poses a hurdle to practical adjudication of values only if the CT requires such adjudication. Without the CT as a constraint, value questions are metaphysically important, and as such indirectly tied to ethical questions, but not tied directly ethical prescriptions.

So suppose that instead of the CT, we hold an alternative view that multiple values and perspectives can be mutually held as reasons for or against action without agreement over the values held.

The Integral Conservation Thesis (ICT): We ought to protect nature because of what we owe regarding the natural world stemming from lots of reasons.

The VRP is no longer relevant to any conclusion about action, because we have unhitched our axiology from and direct ethical consequences. The ICT

directly provides moral force without needed agreement on axiology, call this the 'Obligation-Centered Thesis' (OCT).

The Argument for the Obligation-Centered Thesis:

- 1. We ought to protect nature because of what we owe regarding the natural world (the ICT).
- 2. Our axiology is ...
- 3. Therefore, we ought to protect nature according to those obligations regarding nature (the OCT follows from 1. regardless of the contents of 2.).

If guided by the ICT our axiology still matters, because it provides reasons within our justificatory framework. The point is that we do not need to nail down and agree on an axiology to move forward, because value does not provide direct moral force. If, however, any narrowly defined value is asserted as action guiding, then the Substitution Problem will arise. The Obligation-Centered Thesis simply side steps the substitution question all together.

Undoubtedly it looks like I am straw-manning many conservationist voices, including those in the Denali wolf management debate. Surely no one arguing that wolves should be saved because of the importance of wolf viewing actually thinks that that viewability constitutes the entirety of wolf value and offers the only motivation for their protection. But my point is that arguing as if such a value were realistic and narrow has consequences. By focusing so intently on such specific values, a discourse has been derailed in an effort to prove the

'other side' wrong. A polarized, uncivil, and hardliner debate naturally follows the zero-sum nature of any assertive value reduction.

The Substitution Problem presents a theoretical challenge to value-centered conservation ethics, because it commits one to defend unintuitive substitutions or tackle the problems on incommensurability. However, perhaps more troubling is the practical challenge presented by implicitly emphasizing the sort of values that could be substitutable. The language of substitutable value often leads to conflicting interests talking past each other. In the face of the NPS arguing for the viewability of wolves, there will always be an implicit Substitution Problem, because trappers don't see the viewability value doing any work. The political entrenchment common in such conservation conflicts is exacerbated by the implicit substitutability of any given concern—viewability, huntability, ecological function, or otherwise. Why give ground to value that couple be replaced? It colloquially seems unnecessary and stymies cooperation and collaboration in favor of a narrow problem orientation.

I have not presented an argument in favor of the OCT over the CT, or an argument that proves the VRP is incorrect. I only mean to highlight once practical problem—the Substitution Problem—that arises because of the CT and could avoided with the ICT (and OCT). This gives us a practical reason to further consider obligation-centered approaches to conservation ethics. While examining the Substitution Problem in philosophical terms demonstrates its potency, examining the Substitution Problem in the real world demonstrates the problematic implications of value-centered ethics guiding a conservation discourse.

Many calling for wolf conservation have used wolf viewability as a proxy for wolf value. This past July the Denali Citizens Council—a local community organization—and the Alaska Wildlife Alliance—a state conservation organization—jointly filed an 'Agenda Change Request' to the State Board of Game to consider requests for a new buffer zone. They state in the request that what is at risk is wolf viewability, photography, and non-consumptive use: "The park's wolf population has declined steadily during the past nine years, and since 2010 the opportunity to view a wolf inside the park has declined dramatically. Significantly, between the spring and fall 2014 surveys an expected rebound in the numbers due to pup production did not occur. Without a solution to this problem, more wolves that venture outside Denali Park will be taken in the 2015-16 hunting/trapping season, placing an already regionally depleted population under additional stress, with associated loss of viewing opportunities" (DCC, 2015). Though loss of viewing is undoubtedly associated with a smaller population, highlighting viewability in the problem definition suggests that viewing represents why wolves are worthwhile, a counter to those that highlight the consumptive value of hunting and trapping.

So, the wolf-buffer debate from both sides looks something like another new Substitution Problem:

- 1. We ought to protect the natural environment in Denali to protect value in nature, which includes the value of animals like the wolf (the CT).
- 2. We can identify value of wolves in Denali in hunting, trapping, and viewability (the VRP)

3. Therefore, we can substitute viewing for hunting and still protect nature.

While conservationists would like to substitute hunting for viewing, hunters would like to substitute viewing for hunting. While the Substitution Problem emerges when viewing could be achieved without a wild wolf population, it also challenges the possibility of win-win solutions when values are exchanged for each other.

The Substitution Problem is so pernicious because, in aiming to avoid the issue, our language often digs deeper into a conflict without the possibility of resolution. If the goal of conservation is to prove the other side wrong, issues like the wolf-buffer will only ever get more divisive.

Consider the following:

I believe the wolf is intrinsically valuable and you disagree. I feel wolves deserve protection, and you think I am wrong. I may appeal to the animal's sentience, predatory function, or ecological importance as part of an ecosystems historical integrity as the source of their value, but, disagreeing with my value assessment, you simply fail to see why the animal ought be protected at all. You view wolves as a danger and a nuisance.

If wolves ought only be protected because of some understandable discoverable value, then one of us is right while the other is wrong. This is the zero-sum nature of value-centered conservation ethics:

- 1. We ought to protect the natural environment in Denali to protect value in nature, which includes the value of animals like the wolf (the CT).
- 2. We can identify value of wolves only in viewability (the VRP)
- 3. Therefore, we cannot substitute viewing for hunting and still protect nature, because viewing represents the true value of wolves

If we avoid the substitution problem without throwing out the CT we remain committed to this zero-sum conflict structure.

III.III How to Do Away with the Conservation Thesis

The intuitive and practical appeal of value-centered conservation is easy to see in the wolf-buffer debate. Furthermore, it is unlikely that many of the voices concerned with wolf management in Stampede truly believe that the value of the wolf can be reduced narrowly to either hunting or viewing. The process in this case emphasized reduction of value because of management mandates. The park Service is mandated to protect the Park for both wildlife preservation and public enjoyment. The ADFG is mandated to manage for public use constrained only by sustainable yield at the Game Management Unit level—a scale too big to guide wolf protecting in Stampede. These practical constraints, paired with the polarized values with which different stakeholders view wolves, make the wolf buffer debate particularly susceptible to hurdles like the Substitution problem.

The conservation call frames the wolf issue as an assertion of viewing value or hunting value, largely in response to the Alaska Department of Fish and Game. Let's review what the ADFG has said: "The controversy regarding the socalled 'wolf buffer' is centered around the allocation of wolves between harvest through trapping and hunting and wildlife viewing opportunities for Park visitors" (Alaska Department of Fish and Game, Emergency Order no. 03-02-15). An 'allocation' is a distribution. Since the ADFG actively evaluates wolves as either a consumptive resource or a non-consumptive resource, the question is not about the distribution of wolves but about the distribution of environmental value associated with the wolf. The controversy centers around weather or not a certain sub-population of wolves ought to be protected. By framing protection as an issue of allocation between hunting and trapping, the ADFG is staking a fundamentally normative claim and committing the wolf buffer debate to the CT. If questioning the protection of the wolf equates to environmental value existing as a thing to be distributed, then the function of management in the Stampede corridor equates to the maintenance of value. Protecting nature to protect value in nature is the CT.

The CT incentivizes specific understandings of value, so the ADFG implicitly taking up a value-centered ethic incentivizes the proxy debate that has lead to gridlock over the wolf buffer. Engaging with the multidimensional subjective dimensions of wolves and those who love or hate them is nearly impossible when the CT calls for quantification of value. Since the removal of the wolf buffer, Assistant Park Superintendent Philip Hooge has said, "We've been able to document a really large decrease in the viewability of wolves in the Park" (Demer, 2013). The important point here is that viewability offers a metric the

Park can "document." People saw wolves and then they didn't--it is a discoverable and definable quality. But just because this metric is easily identifiable does not mean it can be wielded as a representation of why Denali Park wolves matter. Overstating the value of viewability as some sort of master value—as both the Park Service and conservation organizations have done—is one formulation of the VRP.

There will always be multiple perspectives operating at different levels in any environmental debate. By using narrow values as a tool meant to represent broader interests, the vast objective and subjective experiences pertaining to a conservation problem are left out of consideration. Integral Ecology, in contrast, organizes the multiple perspectives in the ecological world into irreducible areas of understanding and experience. First developed by popular theorist Ken Wilber, the Integral Model and Integral Ecology hold that issues co-occur in four quadrants, the exterior-individual (behavior), the exterior-collective (systems), the interior-collective (cultural), and the interior-individual (experience) (Wilber, 2000). With this in mind, it is obvious that any one value is necessarily unrepresentative of an issue. Even if an intrinsic value exists in the wolves of Denali, the assertion of such a value is unlikely to do any work for conservation if it excludes other perspective. Similarly, if the consumptive value of wolves asserts a truth that excludes incommensurable values from discussion, then our debate forum is broken. The Integral approach looks to bring together all quadrants on all levels (the AQAL approach) (Wilber, 2000).

Integral Ecology offers an organizational tool for integrating fragmented perspectives—philosophical, spiritual, religious, social, political, cultural, behavioral, scientific, and psychological—into one comprehensive environmental

knowledge structure (Esbojorn-Hargens and Zimmerman, 2009). In looking at how environmental value has been misappropriated in environmental discourse, this structure provides a path to melding value perspectives without reducing value. This will not only help move forward with a discussion of environmental obligations, but also help frame the root issue with contemporary environmental axiology; as Esbjorn-Hargens and Zimmerman argue, "If we fail to distinguish among ground, extrinsic, and intrinsic value, we tend to emphasize only one of these value hierarchies. In such a case, we may end by promoting radical ecocentric egalitarianism, according to which everything has the same ground value....Only a multitiered valuation scheme can provide us with the distinctions needed for dealing with difficult cases" (Esbjorn-Hargens and Zimmerman, 2009, p. 483). While emphasizing viewability may seem like a strong environmental position from which one could argue for wolf protection, it ultimately undermines the conservation agenda because emphasizing viewability grants it substitutable value. The full context of Denali National Park is fundamentally important to the discussion. While the wolf buffer debate has highlighted objective quadrants, the subjective experience, culture, and history associated with the issue are just as important for understanding the norms that ought to guide action in Denali.

Wildlife conservation is deeply imbedded in the history of Denali National Park, an important cultural and social context for our responsibility regarding wolves in the area. The wolf-buffer zone forces wildlife managers at the state level to grapple with this context that is strikingly different from the context elsewhere in the state. Denali National Park was founded as a refuge for

the Park's wildlife, so that as a national community we would have the amazing animals of the subarctic in perpetuity.

The binary view of wolves in Denali—representations of the wilderness to be viewed from a bus or competition to be hunted and trapped—overlooks important cultural, experiential, and historical dimensions of the issue. Such perspective rests within the interior quadrants of the Integral perspective. So lets look into those quadrants and see what we find. Denali was largely unknown to the outside until Charles Sheldon traveled north to explore the area in the summer of 1907. Sheldon was a famous big game hunter who planned to gain insight into the wildlife of the north and hunt the white sheep found there. Dahl sheep, the northern cousin of the big horn, are the world's only wild white mountain sheep. They are found in Alaska, the Yukon, and nowhere else. Sheldon couldn't resist going to this distant frontier in hopes of hunting these animals. During his first trip, not only was Sheldon successful in his sheep hunt, but he also made one of the earliest Western recordings of the vast subarctic ecosystem in Denali. Impressed with the landscape, Sheldon returned the following year, spending a summer and winter in Denali. That same year prospectors struck gold in the Kantishna Hills, in what is now the Park's western end (Sheldon and Merriam, 2000).

As a stampede of miners descended on the region to stake their claim, a new market for meat followed. Market hunters where so aggressive in killing sheep and caribou for the new population of miners that Sheldon personally observed a decline in the wildlife populations. As a hunter, Sheldon feared that future generations would not be able to have the experience of hunting the caribou or sheep. As a naturalist, Sheldon worried that the ecosystem and

wildlife he had come to love would be lost. Returning from Alaska, he channeled his concern for these animals into an active campaign to have the area set aside in perpetuity as a game reserve. Sheldon, personal friends with Teddy Roosevelt, lobbied the elite of Northeast for nearly ten years, before he managed to convince them of his mission (Sheldon and Merriam, 2000).

In the midst of Sheldon's efforts to see Denali protected, the United States Congress passed the 1916 National Park Service Organic Act, establishing the National Park Service and National Park System.²³ The Park Service was given a dual mandate to manage the parks both for public enjoyment as well as for protection of the natural environment. This opened the door for a new type of landscape and ecosystem preservation. In 1917 Denali, originally called Mount McKinley National Park, became the nation's 14th National Park, the 4th park established after the passing of the Organic Act. Roughly two million acres encompassing the Mountain and the stretch of landscape, Sheldon brought to life an ethic of protection in the minds of politicians who would never see Alaska, let alone Denali.

The original Park encompassed only the summer range of many of Denali's large animals. The caribou and the sheep migrate north to lower elevations as winter snow falls. The wolves follow behind. Largely in an effort to protect the entire range of these animals for which the Park was established, the boundaries were expanded in 1980 with the passage of the Alaska National Interests Lands Conservation Act. Today the six million acre Park is one of the

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²³ The first National Park was established in 1872 (Yellowstone), others followed (for instance Mackinaw and Rocky Mountain), but until 1916 there was no structural arrangement for Parks.

few protected intact ecosystems in the world, and is arguably the only accessible wilderness of its kind (with comparable protected areas like Gates of the Arctic National Park having little or no road access).

This history and subjective experience (the interior collective Integral quadrant) has created a palpable culture of conservation surrounding the Park. Its cultural purpose has been the protection of wildlife. This culture has spilled outside the Park boundaries into other aspects of environmental management in the area and into our scientific knowledge of wildlife protection.

While the conservation culture has been developed and cultivated for years as part of Denali, a tension between conservation priorities and land use runs equally as deep. In the 1920s the infant Park struggled to keep poaching to a minimum and until the 1980s there was deep conflict between the Park Service and mining that was taking place either illegally, or legally through grandfathered in mining claims within the Park.

Wolf trapping is not new, nor is the debate over trapping in the Stampede Corridor (Rawson, 2001). That being said, part of the original agreement at the time of ANILCA was for the Corridor to eventually become part of the Park, acquired through land swaps. The policy tool was unable to originally include the area within the expanded Park boundaries, but the policy goal intended with the passage of ANILCA was in part directed at wildlife protection.

The area along the Stampede Corridor is also known as the Wolf Townships. Wolves are an ingrained part of the area's culture and history. Along with mining, subsistence as a way of life brought people to the townships and kept people in the townships. Alaska's population continues to grow, and people continue to want the same things Alaska has to offer. So, for example, people

want moose, but more and more hunters means it no longer a given that everyone will get their moose. In the stampede corridor some might say that an increase in hunting pressure along with the fact that the area doesn't provide great moose habitat means that people can't expect a successful hunt. But the culture that has drawn people to the area might also lead them to search for alternative means of posting moose numbers, like decreasing predatory competition from wolves.

The complex cultural history of market hunting, subsistence trapping, Murie and his wolf studies, and a slow shift in public perception and Park policy concerning the wolf only adds to the nuance and complexity of wolf management in the area (Rawson, 2001). The disparate values that lead to a Substitution Problem type practical hurdle are rooted in rich environmental context.

Nearly everywhere there are wolves there are also conservation conflicts. The wolf is a polarizing animal in modern North American society. The image of the big bad wolf underlays a deep social fear inherited from a different time and place, but lingers in a sentiment that may be particularly potent in the American West, where both wildlife conservation and predator extermination have a long history. While many view these animals as dangerous killing machines, little evidence supports this notion. In fact, 2014 saw beavers attacked more humans in North America than wolves (1 person).²⁴ Nonetheless, as wolves are recolonizing areas like Idaho, Montana, and Wyoming, they are often met with alarm, hatred, and aggression.

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²⁴ According to the Associated Press, http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/06/beaver_attacks_2_men_who_climb.html.

Across the conservation table from wary wolves threatening people and property, sits the wolves of *White Fang* and *The Call of the Wild*—noble, elemental, and picturesque symbols of the wild. As wolves left the American landscape, both ecological study and a greater known history of human interaction painted a picture of the wolf as a shy, protective family oriented animal (see for example Farley Mowat's fictionalized narrative account of wolf study in *Never Cry Wolf*). Accepted by the environmental community as a symbol of wilderness too late to save many wolves across the West, the disappearance of wolves became emblematic of the closing of the frontier. The wolf became a symbol of wild potential energy in a landscape now squeezed-in by modernity. This role for the wolf as a mascot of wildness has persisted, on T-shirts and park brochures alike, though the majestic mascot of true wilderness held on an environmentalist pedestal, may be no less fictional. The fictionalization of the wolf, however, highlights the social space wolves occupy.

Despite the persistence of both wolf narratives, broader social understanding of the wolf has come a long way. We have more than a century of data showing what happens to a vast diversity of environments when wolves are removed. Breakthrough work specifically in the Denali Area by Adolph Murie, Gordon Haber, David Mech, and a growing cohort of wolf ecologists has demonstrated the importance wolves play in regulating and improving the health of prey species, as well as the remarkable social interactions and intelligence of wolves as individuals (Murie, 1944; Haber, 1996; Mech, 2003). The draw of wolves as hallmarks of National Parks where they still hold strong demonstrates a perceived aesthetic value. At the same time, wolves eat meat—cows, moose, dear, livestock—and where cattle and sheep kills are not

uncommon or where hunters compete for prey animals when wolves share the landscape, the risk of living with predators is not fictitious.

What is undeniable is that many people care greatly about wolves, many environments are greatly impacted by a lack of wolves, and many people have a reasonable fear of how wolves may impact their property. As novelist Farley Mowat argues, "We have doomed the wolf not for what it is, but for what we deliberately and mistakenly perceive it to be – the mythologized epitome of a savage ruthless killer – which is, in reality, no more than a reflected image of ourselves" (Mowat, 1963, vi). More objective observation, demonstrating support for certain ecological hypothesis cannot reframe the bones of disagreement. Embracing the qualitative, experiential, and subjective to orient conservation goals—which can be achieves with the tools and understanding of ecology – offers a policy challenge, but a path to an integral problem orientation.

This requires a shift in the language used. What most who are calling for wolf conservation mean when they say wolves ought to be protected for their viewability is much broader than viewability at face value. If we can move past the explicit Conservation Thesis at the root of debate, then proxies like viewability are no longer needed. Shifting our language would open the door for compromise and collaboration. When voices in the debate shout facts supporting one value the result requires a zero-sum discourse. If the Park Service is right about the value of viewability, then the ADFG must somehow be wrong, and vice versa; true compromise, win-win solutions, would then be impossible.

While the Organic Act, ANILCA, and Park Service mandates have used legislated landscape protection as the conservation tool for protecting wildlife, the purpose of the Park has always been the protection of wildlife. From an

historical perspective, we as a society have already agreed through a representative democratic deliberation that we will take this place as a commons. In this way we may not need look further. The animals are subjects of an obligation that society has already taken on. Wolves could not be substituted for their viewability on such a view because their or the subject of our social responsibility. Similarly hunting and viewing cannot be substituted for one another, but need individual consideration. Obligation-centered ethics side-step the Substitution Problem by orienting our ethical discourse around the deliberation of reason rather than the truth of value.

Local trapper (and spearhead for the anti-buffer zone movement) Coke Wallace was recently quoted as saying, "This buffer zone? It's a nonissue. It was never a biological issue; it was thrown out to appease the ecological people, and they're not going to be happy until the buffer zone brushes up against Canada. I mean, you've got 6 million acres [locked up in the park]. How much is enough?" (Murphy, 2012). He highlights a very important point. The issue is not entirely a biological one. Values cannot be derived from biological observation. However, it is also ridiculous to suggests that there is not something unique about a swath of landed surrounded by Denali Park lands, home to Denali Park animals. Denali provides both a hold out for the wolf in an unfriendly time and a long-standing prime site for ecological study, something that we have already socially accepted twice (both in setting aside the Park, and again by expanding its boundaries).

Our responsibility to wolves and people stems from many reasons—objective, subjective, personal, and social—moving past a language of 'truth,' embracing qualitative values, and avoiding the proxy debates that come with

reducing environmental values are all steps toward an obligation-centered conservation ethic. At the end of the day, finding common ground is a whole lot harder if environmental value is asserted based on one perspective. Coke Wallace shot a breading female wolf from a highly visible Park pack in 1999, 2005 and 2012. He was recently quoted as saying, "Contrary to popular opinion, I don't hate wolves...In fact, I think they're cool as hell. Only problem is, every five to seven years I catch the wrong wolf" (Clynes 2016, p.69). In the Denali case there are only a handful of people actually hunting in the former Buffer Zone, and they likely share many of the conservation goals with those calling for the zone's reinstatement. Inevitably Wallace is right that his actions have not ruined the Denali 'visitor experience.' Perhaps working together to find a path forward would be easier if both sides of this debate recognized that respect has been lost in the defense of specific value that doesn't fairly represent the issue. It is entirely feasible in this case to get the half a dozen local trappers, director of the board of game, National Park Superintendent, and someone from an organization like Defenders of Wildlife in a room together. Perhaps there is a compromise out there, but at least a discourse ethic could be achieved (or at least approached).

Ultimately the democratic process that has already set aside the Park as a tool for conserving wildlife suggests that there are good and widely accepted reasons for protecting Park Wolves (irrespective of local hunting preferences), but viewability alone does not express the suit of reasons at play. The discourse on value should yield to consideration, deliberation, and ultimately justification. Looking at how conservation can be understood as an obligation in the next chapter will help flesh out this idea. The Denali wolf management case shows that value-centered conservation ethics is necessarily narrow, using

environmental value as a stand in for the multifaceted moral dimensions of conservation as a goal.

CHAPTER FOUR:

THE CONTRAST OF VALUE AND OBLIGATION: PROTECTING NATURE FOR LOTS OF REASONS

Chapter Four

The Contrast of Value and Obligation: Protecting Nature for Lots of Reasons

"Love of the "highest good" Moral philosophers have always recognized that feeling must supplement reason so that the objectively good can exert a force on our will; in other words, that morality, which is meant to have command over the emotions, requires an emotion of its own to do so."

- Hans Jonas

Introduction

Deep in the heart of Alaska, about one hundred miles Southeast of the Stampede Corridor, a dam on the Susitna River has been proposed by the state as a means of filling a growing energy need. While public debate and opinion are still very much in their infancy, a common argument against the dam claims that we oughtn't pursue the project further because a dam would critically disrupt wildlife, particularly the Chinook (King) Salmon—one of the five species of Pacific salmon that spawn in the Susitna drainage. The debate surrounding the Susitna-Watana Dam project focuses on the salmon's ecology but ignores a needed discussion of their value. Local conservation advocates herald the salmon as a primary reason not to dam the Susitna, 25 creating a bottleneck in this conservation debate by focusing on narrow and definable value, rather than on ethical reasoning. Philosophically we could look to understand salmon value from an ecocentric, biocentric, or anthropocentric perspective, but how do we compare that value against reasons for building the dam? The case that salmon, particularly the Chinook (king salmon), provide a good reason not to dam the Susitna requires further philosophical clarity.

²⁵ The tagline of the Susitna River Coalition, the main opposition to the dam reads, "Supporting Salmon, Wildlife, and Community."

This chapter does not seek to define the value of Susitna River salmon, but argues instead that we do not need agreement over such value to move forward with conservation if we approach conservation with an obligations-centered ethic. Obligations philosophically describe conservation even when conflicting sides of a conservation debate hold contradictory positions on the value of a resource.

As I have discussed, the broad idea of conservation has a complex normative dimension that has in the past largely been reduced to narrow environmental axiologies and assumptions of realistic value as motivating environmental protection (i.e. protecting nature protects value). Regardless of the metaphysical truth behind such an approach to conservation ethics, many practical problems arise with the implementation of such ethics, and many theoretical hurdles arise with defending any particular approach as uniquely metaphysically true, something a messy case like the Susitna-Watana Dam will help to further illustrate. As I suggested in chapter one, an obligations-centered ethic provides a theoretically defensible and practical alternative to valuecentered ethics. Regardless of the true intrinsic worth of Susitna River salmon or any other salmon value—only by incorporating salmon through reasons within a multi-dimensional framework can such environmental values be put to use. Environmental ethics has largely failed to provide tools for thinking about conservation in this way. In chapters one and two, I suggested that valuecentered and obligations-centered ethics are in contrast to one another. Here I hope to show that the distinction is more nuanced. Value plays an important role in implementing and understanding obligations, and obligations ground a realworld conservation imperative.

In this chapter I also further examine the nature of obligations regarding the environment and argue that because an obligations-centered ethic best describes the nature of conservation, debates over metaphysically real value are not always productive. Obligations do not just offer an option for building an ethic of conservation, but obligation describes the ethical underpinnings of why we ought to protect nature and provide a theoretically plausible means to move forward in conservation conflicts. To make this case, I will contrast value-centered ethics and obligation-centered ethics in the Susitna-Watana Dam case. While saving the Susitna River or developing the Susitna Dam is a messy and complex issue, it shows how a breadth of reasoning, including specific value, is essential for a comprehensive problem orientation. Incorporating a breadth of reasoning into one ethic demonstrates the plausibility of obligation-centered ethics, but more importantly the case of the Susitna Dam shows how we do not need agreement on environmental value or a universal attitude toward value to get conservation off the ground.

The ethical foundation of our conservation discourse will only succeed if we can incorporate it into a broader problem orientation. Integral ecology offers a fundamental categorization of the perspectives used to look at an environmental problem. Integral ecology, as discussed in chapter three, groups these perspectives into the objective—concerned with behavior and composition, interobjective—concerned with systemic structures, subjective—concerned with experience, and intersubjective—concerned with culture and social systems. Philosophy represents only a small number of the many perspectives that could be taken on an environmental issue, and primarily resides in the subjective and intersubjective quadrants. What Integral Ecology points out is that any one

perspective is intimately tied to others. While I do not provide an Integral analysis in this chapter, with Integral Ecology in mind I aim to present an ethical perspective that can be worked into a cooperative and collaborative understanding of conservation conflict.

This chapter proceeds in four sections. In section one I examine the case of the Susitna-Watana Dam as an example of value-centered ethics stagnating a conservation conversation. In section two, I argue that value agreement is not necessary for norms to guide conservation because obligations, independent of value realism, describe why we ought to protect the natural world. To do so, I use a series of thought experiments and intuition pumps aimed at revealing how responsibility for the natural world arises. In section three I review what obligations are in light of my argument. I discuss value as a part of an obligations-centered approach and how obligations are fundamentally interpersonal. Finally, in section four I look at possible objections and offer my conclusions on the obligations approach. The discursive challenge in the Susitna debate rests on the normative assumption that we need to figure out what nature is worth to get conservation right. An argument for understanding conservation as an obligation challenges this assumption and suggests a talking about conservation without seeking agreement on value.

III.I Power or Fish

The debate over whether or not to dam the Susitna River has revolved around economics, energy needs, and a value-centered ethics that suggests the Susitna-Watana dam threatens a dynasty of value, reliance, and ecology inherent

to the salmon. The Alaska Energy Authority states that the project is committed to protecting critical salmon habitat and the salmon run. Project opponents claim that such a goal is simply not possible, and that conservation of the Susitna salmon fisheries is incompatible with dam development. While new information is rapidly changing the specifics of the debate, the current dynamic will likely only intensify. Interestingly, the salmon have been accepted as a conservation goal, with disagreement predominantly developing over the science and the substitutability of the salmon's value.

The Chinook salmon (*Oncorhynchus tshawytscha*) rules over other pacific oncorhynchi in size, voracity, beauty, and taste. Every summer these 'king' salmon run upstream from their ocean abodes to the stream habitats they were born in. As these monarchs of northern water follow an inexorable instinct leading them inland up Alaska's icy rivers, they stop eating, change shape and habit, and upon reaching their spawning grounds, they lay eggs (or sperm) and die. The run can take weeks, even months, and extends up hundreds of miles of river and stream. The salmon runs of central Alaska support a vast human and natural ecosystem. For centuries the king has been prized and sought after for food, with its fatty flesh capable of helping man and bear alike survive long, subarctic winters. These fish continue to be central to the livelihood, economy, and culture of many Alaskans.

Statewide opinions of the Susitna-Watana Dam project are mixed, though many locals, particularly in and around Talkeetna (the only sizeable community directly on the banks of the Susitna), have expressed extreme concern over impacts to the king salmon run and other river fish. If built, the Susitna-Watana Dam could, "provide long-term stable power for generations of Alaskans"

(http://www.susitna-watanahydro.org/project/project-description/ Accessed October 1, 2014). The dam project will generate 50 percent of the current Railbelt's (about two thirds of the State's population) electric demand, or 2,800,000 megawatt hours (MWh) of annual energy once it comes online in 2024. The installed capacity would be 600 megawatts, making the dam one of the largest ever built in the US. Estimated costs could exceed \$8 billion, and the dam itself would flood 24,000 acres of land in the heart of an untrammeled Alaskan wilderness. The dam would sit 184 miles upriver from Cook Inlet and 22 miles upstream from Devils Canyon, "a narrow, highly-turbulent section of river that serves as a natural impediment to migrating salmon" (Alaska Energy Authority, 2014).

Many still worry about both direct impacts of cutting-off this salmon migration route, as well as down stream impacts to the entire salmon population and salmon ecosystem. For example, president of Susitna Dam Alternatives Richard Leo has expressed particular concern over winter flow rates (Barringer, 2013). Typically juvenile salmon travel from the tributaries in which they are born to the main branch of the Susitna once winter flow clears and calms the water. In order for the Dam to be viable, winter release will be several times greater than natural winter flow, making it nearly impossible for juvenile salmon to hover along the banks of Susitna. Because of concern for the salmon population many want the state to abandon the project. "The point is simply that we must preserve systems like the Susitna where king salmon still thrive" (Sanford, 2014). This language is indicative of the conservationist push; it assumes that the salmon are intrinsically valuable and that such value demands protection.

Salmon are economically and ecologically important to the region, as well as a central part of the cultural identity of Interior and South Central Alaska. More than 30,000 sport fisherman salmon fish on the Susitna every year (Alaska Department of Fish and game 2013 Susitna Drainage Sport Fishing Survey²⁶). Many Alaskans also rely on subsistence fishing on the Susitna. The Cook Inlet, where the Susitna eventually hits the ocean, is the countries fourth largest salmon fishery (one of the largest in the world), providing thousands of jobs and more than \$100,000,000 to the Alaska economy every year (more than \$2 billion since 1985). The Susitna Dam debate potentially turned a corner in 2015 when funding for the dam was briefly removed from the state's budget; however, the active parley is far from over.

Concern for the Susitna River salmon provides one example of a multifaceted conservation conversation that has all too narrowly relied on ideals of value to push for or against development. Though the debate is not primarily philosophical, it mirrors the ethical conversation at large and an obligation-centered ethic could help better parse out the many perspectives and values at play, providing an orientation, language, and tool for approaching this real world case. What salmon are worth has been a proxy debate for whether or not we ought to protect the Susitna River, a conversation that has not come out into the open.

Information about the Susitna salmon help paint an ecological picture, but, within a dialogue of contradictory value perspectives, ecological information does not directly provide an argument for or against conservation. More than 50

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²⁶ http://www.adfg.alaska.gov/sf/sportfishingsurvey/index.cfm?ADFG=region.home

scientific studies are currently underway, investigating everything from dam impacts on wildlife, to recreational use, to archeological history. These studies include several aimed at assuaging concern for the fisheries by better understanding the fish population. However, if a dam could not override some intrinsic value inherent to the king salmon, then more information will not change the debate. This type of ecological information is essential in understanding how to protect and promote the king salmon of the Susitna River, but does not directly speak to why we ought to protect the Susitna River.

Instead of bringing multiple values to the table, the salmon debate generally has not challenged salmon value, but avoided challenges or defense. While the AEA has not released full findings from the Susitna studies, it claims that the project would not significantly affect the Susitna salmon because the dam site would be above the salmon run. At the same time, their own habitat study has shown salmon spawning actually does occur above the dam site (Alaska Energy Authority, 2013).²⁷ While the natural barrier at Devil's Canyon, near Watana may end the run upstream for many fish, salmon have been observed nearly up to the Susitna Glacier. Opposition to the dam has also noted that looking simply at population numbers and spawning locations—the main foci of AEA studies—does not fully account for dam impacts.²⁸ Changes in stream chemistry and oxygen content could drastically impact salmon runs. Change in stream flow, including the projects planned winter flow increase,

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²⁷ In fact, habitat mapping by the AEA has shown 11 tributaries in the Upper Susitna drainage to contain Chinook salmon populations.

²⁸ The Coalition Against the Dam, makes this case on their website, http://susitnadamalternatives.org/. Interestingly, the AEA has not incorporated fish into their study of aesthetic or cultural resources. The primary AEA studies have been a synthesis of population data, and a habitat map.

could decimate juvenile salmon populations and some worry this is not being appropriately considered. Furthermore, studies conducted for the project have been criticized for using too narrow a window of time (only one or two seasons of data) to formulate conclusions.²⁹ Citing a slough of problems, the National Marine Fisheries Service went so far as to file a complaint with federal regulators saying the Alaska Energy Authority's fish data was so unreliable it "wasn't usable" (Hollander, 2014).

Salmon are certainly not the only point of contention, but have become a rallying point for Susitna conservation efforts. The salmon have observable economic value, are sentient beings, and are vital aspects of the ecosystem. Environmental ethics could define the value of the salmon based on nearly any environmental axiology. But, disagreement in the real world is posed as a problem of science. Questions of how the fish will be impacted and how such impact could be minimized have taken center stage. This proxy debate side-steps a necessary stride in properly orienting the problem, the consideration of multiple values.³⁰ The entire debate is predicated on a natural value, a use value, a cultural value, and an existence value that have not been openly teased out. Such questions may be greatly helped by ecological understanding, but are

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²⁹ These issues have been covered by the NRDC several times, most recently by Noah Garrison on his resources issues blog, October 3, 2013.

http://switchboard.nrdc.org/blogs/ngarrison/the_susitna_river_dam_-_a_bad.html. The A.E.A. also covers this through several studies, including in their habitat map, AEA, *Technical Memorandum: Characterization and Mapping of Aquatic Habitats.* F.E.R.C. 2013. Further information can also be found in the projects 2012 Report to Legislature, Susitna-Watana Hydro, *Report To Legislature 2012.* Prepared for Alaska State Legislature, December, 2012.

This problem is two fold. One, an issue of ethics: what values are threatened and why?

And two, and issue of the policy process (the first step of Laswell's *Problem Orientation*): What is it that stakeholders wish to accomplish, how ought they be prioritized in our policies, and why?

ultimately philosophical questions concerning the worth of a salmon. If using Integral Ecology as lens here, we might say that the exterior quadrants, focusing on the objective and interobjective realities of salmon, energy and people are being considered in isolation through observation and analysis. Concerns regarding salmon behavior, ecosystem composition, and human economics are narrowly objective perspectives that rely on ecological and economic methodologies. While these are obviously important to the issue, unless such perspectives can be connected with the subjective and intersubjective perspectives it is hard to put the information to use.

While describing the varying values connected with the Susitna's salmon population is certainly helpful, relying on any specific values has created a bottleneck, where opposing sides simply talk past each other. So what is needed here is not an axiology that locates the salmon's value as an exercise isolated within the subjective quadrant, but rather an ethic that takes the many perspectives, concerns, and observations under consideration. The interior perspectives, understood through experience and mutual resonance, are not part of the debate; they are only tangentially incorporated as part of the problem orientation. The point here being that what we ought to do does not directly connect with the observable world without normative guidance from ethical principles.

Imagine for a moment near perfect scientific information:

Models clearly show that the dam, despite state of the art fish ladders and conservation efforts, would decimate the salmon population.

Would this be enough to deem the project undesirable? Maybe, but such a case has not yet been made because the justifiability of destroying the salmon population for the dam is a discourse very different from an assertion of a specific narrow salmon value, or an observation of salmon behavior. If salmon are not just metaphysically imbued with value, but if such value is to motivate action, then a specific theory of their biocentric or ecocentric worth must be agreed upon by both conservationists and the dam authority. Not likely anytime soon, despite the plethora of environmental ethics works, from Singer to Taylor to Callicott, at the disposal of this conservation conversation. Even though an effort to establish specific environmental values has not been put in technical terms, the espousal of value from dam opposition does no work if the ethic for protection behind conservation efforts requires agreement on the implied value. Most commonly, dam opposition has pointed to the rarity and scale of the king salmon in the Susitna.³¹ This population represents Alaska's fourth largest. However, an articulation of why this matters must follow for such an argument to have the desired weight. Environmental ethics could provide an understanding of this value based on Leopold's Land Ethic, or other ecocentric perspectives, but the Dam Authority has already articulated an anthropocentric viewpoint incompatible with such a concern.

The assumption in many conservation debates, including this one, seems to be that the way to move forward is to convince others that your value perspective, in this case ecocentric concern for the king salmon population, is

³¹ This can be seen both from the Susitna River Coalition and in the many public voices expressed in *Alaska Dispatch News* concerning the issue.

'correct'. But do we need value in this way? Narrowly defining specific environmental value becomes a source for intractable problems, whereby conservation cannot proceed until agreement over specific value is reached. If the salmon are narrowly valuable in their provisions to local economies, the state could simply help provide new economic opportunities. If the salmon are narrowly valuable intrinsically as a population but not as individuals, then the state could help bolster populations elsewhere to build and replace value.

Clearly salmon are worth quite a bit to many people for many reasons in many ways, but why do we need to understand protection or development solely in terms of specific value? If we can move past this value disagreement, cooperative conservation becomes much more attainable. Each economic, ecological, cultural, experiential, and social reason brought to the table needs to be considered without a necessity for metaethical truth in order for this debate to move forward effectively. An obligation-centered approach can provide guidance, precisely because obligations reorient the ethical conversation to one about agency rather than one about value.

The emotional entrenchment people have expressed regarding the value of the salmon demonstrates both the inspiration of realistic environmental value as well as the conflict it breeds when taken as one-dimensional orthodoxy. Using the array of perspectives and reasons as part of a cooperative and collaborative conservation discourse avoids problems associated with narrow specific value realism. While this is an obvious goal in practice, an obligations-centered ethic explains the philosophical root from which such a goal sprouts and provides a theoretical tool for promoting such an approach. Ditching value agreement as a requirement for conservation helps untangle the conversation and conflict in

cases like the Susitna. By arguing that obligations explain why we ought to protect nature, I show how ethics can defend a multi-faceted conservation discourse.

III.II Conservation as Obligation

Conflicts in the conservation world—like the debate between energy development and the Susitna River salmon—often hinge on how one values nature. Many environmentally minded people value the Susitna River Salmon intrinsically. Intrinsic worth here is often pitted against the use value of salmon as a resource for human ends, or the value of energy for human ends. Even within each perspective in this debate there is much disagreement. What is more valuable, Salmon as a population or economic engine? Fishing or energy? The function of the fish or the existence of the fish? Any conservation ethic that relies upon a realistic understanding of environmental value³² risks gridlock when such value is disagreed upon. Furthermore, such values force the reduction of value to metaphysically wooly notions that can lead to practical stalemates. If I think salmon have an intrinsic value that ought to hold priority and you think that the human development has intrinsic value that ought to take priority, we will simply hold that one another is wrong unless we can revise our position based on further reasoning, justification, and debate. Similarly, if I value the salmon population, narrowly defined as a certain number of animals, and that value is at the core of a conservation ethic, then you might justifiably commit all

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³² Again, any view that suggests value is something that is real, out there in the universe, and discoverable.

manners of evils in the Susitna landscape as long as you figure out a way to make captive breeding successful, hence maintaining the population numbers.

Integral Ecology again gives a way of understanding how particular values are incomplete. Studies assessing impacts on the salmon population, health, spawning, behavioral changes, and distribution are all within the individual exterior quadrant. Concerns about ecosystem impacts, economic dependency, and community politics are all within the collective exterior quadrant. The interior quadrants including personal perspective, salmon experience, individual and collective identity, group values, ideologies, phenomenology, aesthetics, and ethical reasoning are left out, unincorporated or implied without investigation, from the debate (Esbjiorn-Hargens and Zimmerman, 2009). While information regarding all of the above helps build an integral understanding of the Susitna salmon, requiring agreement on metaphysically real value is to take specific aspects of only one or two quadrants and give them priority in isolation.

An obligation-centered orientation can side step issues of value realism by emphasizing the ethical reasoning and process behind conservation. This is not a new approach in the realm of environmental ethics and has been suggested in general terms (O'Neil, 1997), as well as for more specific cases and applications of environmental ethics like restoration (Lee, Hermans, and Hale 2014), but has not yet gained widespread traction in field of conservation. As I discussed in chapters one and two, recognizing the problems with realistic theories of value, Onora O'Neil has suggested that relying on objective theories of value presents several theoretical and practical hurdles that obligations do not

(O'Neil, 1997). Building on O'Neil, we can understand obligation-centered ethics as foundational to why we ought to protect nature.

Consider the following:

Adopt-A-Highway

You are driving down a US interstate and pass an 'Adopt-A-Highway' sign. The sign reads that a Mr. Duke Nukem³³ has adopted this section of road. You notice, however, that as soon as you reach Mr. Nukem's section of highway there is trash strewn about everywhere.

You might say that Mr. Nukem has done a bad job stewarding the road and most would agree he ought to clean up the litter.

Mr. Nukem, getting wind of your disappointment in him, might point out that road is still drivable, that the view of nature in the distance is not impaired, and that he sees no difference between tarmac and trash. He hence sees no reason to *clean up the trash.*

Mr. Nukem's argument here is essentially that the road has lost no significant utility and therefore no value has been threatened or lost by the presence of trash. He sees no difference between tarmac and trash because on the

³³ Mr. Nukem has always been aghast at the use of his name in the video game world, though he undeniably bears a striking resemblance to the Captain Planet nemesis of the same name.

criteria of drivability there is no difference. One might try and make a contradictory claim that Mr. Nukem's negligence has lead to the degradation of the road's environment, arguing that value has been lost because Mr. Nukem has allowed trash to pile up, polluting, interrupting, and spoiling an area of value. Perhaps the ecosystem is damaged, or local people suffer from water pollution, individual sensibility in favor of a clean road has been disregarded, or perhaps rare and endangered condors have been allowed to tangle themselves into 6-pack soda plastic rings made from the fat of baby pandas. Life, beautify, diversity, ecological integrity, or health may be truly threatened.

However, most would agree that regardless of any particular view-shed disturbance, species loss, ecological function degradation, or negative human response, Mr. Nukem has simply not done his *duty*. Ordinary intuition might have a hard time articulating this, but if you are of the opinion that Nukem has done wrong regardless of any specific loss of value on the road, duty offers a reasonable option for understanding this wrong. In adopting the highway, he *agreed* to keep it clean. This is simply what it means to 'adopt-a-highway.' It does not matter why such an end is good or whether or not he views trash as disvalue, he agreed to clean it up. That is why Nukem is being *negligent*, because he expressly has taken up a responsibility then failed to follow through. He does not own this road, the road does not need affect him, he need not benefit from its maintenance, and he is still obligated to take care of it because that is his responsibility. Some have called such a responsibility an 'agent-relative special obligation' (Nagel, 1986).

Stewardship responsibilities do not hinge on complete agreement over value. Institutions like highway adoption can provide structure for taking on

certain obligations, which are dependent on that framework, but not on realistic value. So, Nukem's responsibility is contingent on his adoption of the highway, not his personal perspective on the road's value as stemming from its drivability.

When we explicitly take on the responsibility for places like National or State Parks, or species on the Endangered Species List, we are essentially adopting them, the same way Mr. Nukem adopts a stretch of highway. While they may be fountains of value, as long as the process by which such places and animals are adopted is open, honest, and un-coerced, then our obligation is independent of such value. Such value is instead part of a suite of reasons within the process of adoption for choosing certain places or species over others and for understanding responsibilities to one another.

What does this look like for the case of the Susitna River? The Susitna River, much like the road near Nukem's House, risks despoilment from certain value perspectives. But agreement over exactly what that value constitutes would not be required if an explicit responsibility were established. The Susitna River has not been adopted, but several parallel institutions could provide such a framework of responsibility, like establishing a public park. This would entail a shift from a negative discourse asserting that the dam is bad, to a positive discourse asserting a responsibility for the Susitna River. A deliberative process considering taking on the area as a National or State Park, Wilderness Area, Wildlife Refuge, or otherwise placing the Susitna or the Susitna salmon under a protective management regime could establish an explicit social obligation to the Susitna and Susitna salmon.

The obligation Nukem holds is easy to see when it is explicitly taken up; this is often the case in the world of environmental management. However, this lens can be equally well used to view responsibilities for the natural world that are implicit to other arrangements and relationships, not just at the institutional level, but also at the interpersonal level. Ownership, use, impact, and other relationships to the natural world similarly explain a responsibility for conservation. Nukem voluntarily adopted that particular stretch of road, entering into a specific agreement, but the same moral relationship may exist free from such explicit agreements. Suppose no one adopted the road: Nukem may have no reason to clean up the litter, but would he then be allowed to trash the road even more, simply because he doesn't value a clean road? Most would likely agree not. In virtue of his use and out of respect for others, he has responsibility not to muck up the road. Through use, property consideration, inheritance, and benefit, we (both individually and socially) implicitly take on the responsibility for many places, aspects, and behaviors in nature.

Consider now:

Lemon

Hoggish and Rigger, good friends, share a car in order to save money. The car is a beater with no significant monetary value. It is dented, scratched, and smelly, with a bad transmission, no front shocks, and a leaky gasket, but it drives.

It stands to reason that Hoggish and his friend Rigger are equally *responsible to one another* for maintaining the car insofar as both friends use the car. Rigger may ask Hoggish to chip in for oil changes, tire rotations, and engine

checks, and most would agree that Hoggish has some obligation to Rigger to help out with these things as long as Hoggish uses the car.

One day Hoggish backs up into a tree, adding yet another dent to the rear bumper. Rigger asks that he fix the dent.

Some in this situation might feel that fixing the dent is ridiculous because it has not reduced the value of the lemon. The car was a piece of junk before the dent, and remains a piece of junk after. However, can we say that Rigger cannot call on Hoggish to undo what he has done? Hoggish damaged something that was not privately owned by him alone, and many would agree that Rigger has every right to hold Hoggish accountable for Hoggish's use of the vehicle. Implicit in co-ownership is a responsibility to maintain the resource, in this case the car. Now if Rigger didn't particularly car about the dent, there seems no reason why he couldn't relieve Hoggish of his obligation, or if he cared but thought some alternative to fixing the dent justly compensated him, then an agreement could be made, but free from such cooperation, Hoggish ought to fix the dent.

Obligations go on to extend beyond the implicit nature of co-ownership.

Suppose now:

Rigger alone owns the car and Hoggish, his good friend, drives it.

If Hoggish dents the car, most would agree that he obviously owes it to Rigger to fix the dent. Use of a resource dictates responsibility for that use. This is a door that swings several ways. If, as may be the case with public lands, society at large owns a resource, users of that resource owe it to society at large to steward the resource. If society would be affected by the use of a resource, a user would similarly hold an obligation to society if society did not own the resource.

Suppose now instead:

No one owns the car. It has been abandoned but Hoggish finds it and takes it for a ride.

Hoggish is responsible for driving safely, obeying traffic laws and conventions, and ensuring the car doesn't hurt anyone, damage property, or endanger the public good. This is not an obligation to any specific individual, but to the community at large. Here the obligation arises not because of ownership, but because of effect. Just because he doesn't own the car, does not mean he can go ahead and leave it in front of a fire hydrant or slam it into a Park fence. The devaluation of the resource, say the denting of the car, is not the only relevant factor. Hoggish is responsible for his use in its interaction with the community.

A voice calling for protection of the Susitna River can be likened to Rigger asking Hoggish to take responsibility for a shared resource, regardless of a differing values perspective. The local conservation voice coming out of Talkeetna arguably represents the group of people most affected by the proposed Susitna Dam. Furthermore the Susitna salmon, which are already part of a complex moral relationship—stemming from the history, aesthetic, use, personal

perspective, and culture of the area—represent a hazard independent from the specific value of the salmon or the economic value of the dam. So even without explicit responsibility for the Susitna River, we ought to consider the implicit obligation regarding the river and salmon.

When we implicitly take on the responsibility for nature through resource use, recreation, pollution, or other such human activities, we are sharing something with specific individuals, the rest of society, and the moral community, similar to how Hoggish shares the car he uses with Rigger. Without meeting an extremely high bar of social justification, it would seem ridiculous to suggest that a hiker should be allowed to dynamite a new pass through the mountains, or that a factory ought to be allowed to use all of the water in the Colorado River. Use implies a responsibility both to steward a given resource, as well as to respect the use and value others find in the resource. The same is true for other implicit agreements like benefit or inheritance. For example, no one would suggest that right whales, decimated by years of Yankee whaling, be taken off of the endangered species list because those of us alive today had nothing to with driving the population to near extinction.

In the cases of both *Adopt-a-Highway* and *Lemon*, the value of the object of use, the road or the car, may very well factor into the discussion and may mater greatly for that discussion, but the obligations held by Nukem and Hoggish do not require any specific understanding of those values. Hoggish and Rigger could argue until they are blue in the face about exactly how the new dent has devalued the car, but Hoggish would likely struggle to argue that he doesn't owe it to Rigger to take responsibility for *his* actions towards a shared resource. Similarly, Nukem might argue until the cows come home that the road works

just fine but would struggle to argue that cleaning up litter isn't part of what he owes when adopting a highway. Hoggish and Rigger, in *Lemon*, have consensually entered into an interpersonal arrangement that has consequences. They must take responsibility for their part of that relationship because each can hold the other accountable. While this interpersonal ratification of responsibility is not present in Nukem's case, in *Adopt-a-Highway* he has through agreement made himself accountable to the community that uses the road.

Nukem's responsibility shows how certain obligations to protect and conserve emerge from a contractualist agreement and Korsgaardian respect for agency and reason (more on this shortly). Not only can we understand conservation as obligation, but also we can see how obligations to protect and conserve sidestep the value debates that often plague conservation conflicts. Value provides the language for expressing essential aspects of the natural environment, something not to be overlooked. However, with a greater focus on the nature and process of obligations regarding the natural world we may be able to avoid getting stuck in narrow debates about such value, and simply use value in our reasoning, discourse, and conversation about responsibility.

Suppose again that no one had adopted the highway: Nukem might not be responsible, but you might very well think that someone *should* adopt the highway. Perhaps you see that Nukem is the only one that lives on that stretch of road. Some of Nukem's behaviors might compel him to adopt the road or implicitly obligate him to adopt the road, just as Hoggish is responsible for his use of the car even if no one owns it.

How might one compel Nukem to adopt the highway? Some might claim that he ought to do so because he uses it, or because pollution is bad, or because his neighbor down the road adopted that stretch of road. Any number of factors and values would be reasons presented to Nukem. Understanding specific values is essential as a tool for providing good reasons, but we don't need to agree on the metaphysical realism of a specific value if a suite of values can be practically accepted. Obligations resulting from such application of value provide an intuitive, practical, and reasonable ethic for moving forward in our conservation conflicts. For example, endangered species mean many things to many people. Without comprehensive agreement on intrinsic value of specific species many can still agree that whales, pandas, condors, cranes, and so on ought to be protected from extinction.

Obligations require a free, open, and honest uptake by responsible parties. This requirement stems from the nature of obligations as an interpersonal relationship. If, for example, Nukem is coerced and forced to adopt the road, his own interests are being disregarded, he is being mistreated, and such mistreatment frees him from the obligation to take on cleaning the road because of the disregard for the reciprocal nature of obligation. Similarly, if there is no process to iteratively reevaluate policy and management, then society past are not respecting the dynamic nature of conservations effect on society present. Certain conversation efforts ought to shift from specific to general management debates. For example, arguing that a mining exception ought to be giving within a National Park undermines the nature of responsibility we have taken up for the Parks; however, there is an democratic congressional process for redrawing National Park Boundaries. Similarly, if many people rally behind defending some animal, place, or resource from development within an obligations-centered ethical framework it makes more sense to discuss land designation and

the possible 'adoption' of such place as a wilderness area, Park, preserve or other protective regime, rather than suggesting that the development not occur within an unrestricted, legal, responsible way (i.e. the Susitna). Any such debate will either be procedural, focusing on the processes for taking on and discharging responsibility, or will be directly focused on the obligations themselves. A narrow reliance on value will only restrict such discussions.

'Adoption' in nature, as well as implicit responsibilities of co-ownership and use impacts in nature presents a real moral need. Our society is more than capable of taking on responsibilities for many places, species, and recourses in nature through large-scale discourse. A comprehensive review of our relevant polices (National Parks, endangered species, leasing programs, national forest management, etc...) would be beyond the scope of this project. However, an examination of the hurdles towards such protections would greatly improve fulfillment of our obligations regarding the natural world.

III.III The Nature of Obligations Revisited

As discussed in chapter two, an obligation is most fundamentally a debt. When one has an obligation, one owes something. If we 'ought' pursue some end or engage in some action we might say we owe it to someone or something. If we want to ask why we *ought* to protect nature, or more specifically, the Susitna River salmon, we must look into the nature of obligation. We might look past the obligation to end states of the world, as has often been done. Such an approach would suggest we ought to protect nature to protect such ends, namely definable and discoverable value as I have already discussed. But we might instead ask

what is the guiding principle behind our obligation? Why do we have a responsibility to maintain a specific value, or why ought we protect nature based on other moral imperatives, responsibilities, and duties that regard the natural world?

When Nukem claims that he has failed no obligation in allowing his stretch of highway to overgrow and infest with litter, he could be said to be making a claim to one understanding of value. If his valuation is correct and value is the source of normativity in such a case, then indeed he may find no ethical reason to clean up the road. If, however, value is not the source of normativity in such a case, but rather one reason in a moral discourse, then regardless of any truth behind Nukem's valuation, he ought to look more broadly than just his own personal value of the road in order to fully consider his obligation in such a circumstance. Again as discussed, most would agree that Nukem bares special responsibility beyond his value of the road because of what adopting a road entails.

To understand an obligations-centered approach to environmental ethics, we can look at an obligations orientation in ethical theory more generally. The neo-Kantian discourse within ethics provides the tools and arguments for understanding how we ought to act based on many reasons. Christine Korsgaard, Steven Darwall, and T.M. Scanlon provide the backbone for this discourse that I draw on here. While not entirely in concert, their work provides a cooperative understanding of agency, reason, and morality. Understanding agent-centered, interpersonally validated reasoning as foundational to obligations regarding nature offers a new explanation of why we ought to protect nature.

So why ought Nukem clean up the road, despite his disagreement about its value? In essence, why ought he be moral, and why is this different than simply acting upon his own personal values? This is one form of what Christine Korsgaard has called the "normativity question" (Korsgaard, 1996). Korsgaard has famously argued that normativity and the underpinnings of ethics derive from our agency. She argues that human agency demands reason. Essentially she understands our agency as fundamentally self-reflective—that through reflection we act, and in order to act we provide ourselves with reason. Building on this premise, she argues that to fully identify as an agent, individually we must recognize and value agency in general, and therefore respect the agency of others. If we act based on our own reasons, Korsgaard claims that we are essentially accepting the authority of our own agency to demand action based on reason. If such a demand holds from our own agency, it follows that agency in others could hold similar authority based on similar reasons. Because of the reciprocity in our agency, she argues, others may make moral claims upon us, and us upon them. The authority of moral claims are then said to be the reasons held by the agents making the claim (Korsgaard, 1996). She further argues that because we recognize the authority of others in the moral community to make moral claims and we recognize that our own personal reasons to obligate ourselves to action may be extended to make moral claims on others, then we must value the reasons of others making moral claims upon us in the same way. Reasons, thus, are not private, but public aspects of our moral procedure, the means for adjudicating multiple perspectives and considerations (Korsgaard, 1996).

Nukem's value of the road as purely a matter of drivability—a functionalist view—must then be considered in our moral debate, but because he is appealing to such a value as a reason not to clean the road, he must reciprocally accept the values of others as reasons to clean up the road. Furthermore, by adopting the road he is not just personally agreeing to certain responsibilities but is also accepting a claim against him by the moral community predicated on certain reasoning that demands he clean the road.

In many ways, accepting reasoning in such a way shows how interconnected value and obligation are. To base an ethic in value, assuming metaphysical and ethical realism, has intuitive appeal because it builds a system around certain beliefs; an obligations-centered approach however, does not have to give up value, but only inclusively incorporate it into a broader ethic. Hans Jonas³⁴ begins his famous work *The Imperative of Responsibility* by saying that, "All previous ethics...had these interconnected tacit premises in common: that the human condition, determined by the nature of man and the nature of things, was given once and for all..." (Jonas, 1984, p.1). The "tacit premise" forces value realism into the center of environmental ethics. Such is the theoretical foundation beneath the Susitna conservation effort. The nature of salmon is held as a truth to be identified. Shifting the discourse in the case of the Susitna Dam towards what we owe regarding the salmon, in light of the many reasons brought to bear,

³⁴ Jonas is not typically part of the neo-Kantian discourse. His work offers a lens through which the foundations of ethics are reimagined in light of modernity, offering a social scale critique of value-centered ethics. Jonas offers a counterpart to the Korsgaardian conversation from the Continental Philosophy tradition.

alleviates some of the pressure put on any perspective to prove itself to be correct.

In many ways, the emphasis on value within debates like the Susitna Dam project and within environmental ethics characterization of conservation can be seen in such a notion, taking as its core mission the revelation of the good. If we can just keep saying that the salmon are important, then we will save them. The bottleneck arising from approaching the issue this way touches on an important distinction commonly overlooked. Often in environmental debates 'value' is conflated with 'the good.' Where as 'the good' makes reference to something seemingly objective, independent of our perspective, 'value', as Jonas puts it, "is easily tied to the questions "For whom?" and "how much?" (Jonas, 1984, p.83). Without this conflation, value is fundamentally apart of an obligations-centered approach.

Aiming to avoid a lengthy tangent, I will assert but not defend a claim that this conflation stems from a fear of subjectivity within moral philosophy. Such fear may be founded,³⁵ however such fear is amplified by the value-centered approach. If realistic moral value is why we ought to protect nature, then it follows that such value is objective, discoverable, and maintainable. However, if subjective values provide emotional support for objective guiding principles, we needn't debate the pitfalls of subjective morality since the subjectivity becomes part of a procedural ethic that is itself grounded in independently validated principles of obligation. So, perhaps the opposition to the dam should be presenting reasons for changing the management paradigm

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³⁵ I feel further discussion of this to be simply beyond the scope of this project let alone this chapter, but the many debates on relativism and subjectivism could provide ample fodder

of either the salmon or the Susitna River, endorsing the adoption of express obligations.

A movement pushing for protection of the Susitna River (for example, as a park or wilderness area) would then be better able to present reasons like scale, history, integrity, and awe to move action without needing to compare such reasons narrowly against incommensurable values like energy. I draw on Jonas and his exploration of value in this discussion of obligation because obligations can be seen to stem from his distinction. "A theory of responsibility, as any ethical theory, must deal both with the rational ground of obligation, that is, the validating principle behind the claim to a binding "ought," and with the psychological ground of its moving the will, that is, of an agent's letting it determine his course of action" (Jonas, 1984, p.85). An obligations-centered approach, as such, is not at all independent of value, but reliant on value as subjective, or at times even objective, reasoning behind what Jonas calls the emotional dimensions of morality and the implementation of an obligation as a guiding and validating principle.

The vital step here is to understand the relationship between Nukem and society at large, or similarly between Hoggish and Rigger. Hoggish or Nukem are not initially moved to do anything in their respective cases—to clean up the road in Nukem's case, or fix the car in Hoggish's case—because their view of value, whether it be drivability of the road, monetary value of the car, or anything else, doesn't line up with the action being demanded of them. The way I understand such a value-centered approach collapses two types of reasoning into one. I would rather not digress into a full-on discussion of practical versus theoretical reason, but the assumption that value is foundational to a

conservation ethic seems to me (and I know this may sound wishy-washy) to take a theoretical idea of reason and use it to highjack reasoning in service of action.³⁶

The reasons behind both Hoggish and Nukem aiming to get out of any responsibility, and the moral authority of Nukem's road adoption and Rigger's co-ownership of the car (allowing others to make a moral claim against Hoggish and Nukem), are both fundamentally derived from a reciprocal, interpersonal relationship. This is what Stephan Darwall calls the "second-personal standpoint" (Darwall, 2006). Darwall argues that moral obligations are fundamentally second-personal because the reasons for acting morally rest on a relationship of address between agents (Darwall, 2006).

If, as Korsgaard argues, we understand the authorities to which morality appeals as the members of the moral community (you and I, in other words) then collectively we legislate the so-called kingdom of ends. This is why an obligation has moral authority, because it is a claim against us backed by the reasons of other agents whose agency we must value. Such reasons, as Darwall argues, are irreducible interpersonal, because they require a moral relationship to hold weight, even if that relationship is simply the recognition of agency. So if we understand obligations as a moral debt to others that arises from Darwall's second-personal standpoint, the justifiability of an action hinges on the appeal to second-personal reasons and the uptake of such reasons by other agents in the moral community.

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³⁶ I accept that this is a horribly inadequate presentation of practical reason. It is simply beyond the scope of this project, but important enough that I wanted to nod to the distinction.

This is where the cases of Hoggish and of Nukem diverge. In Hoggish's case, we must approach an obligations-centered ethic by looking at what he owes Rigger, the type of obligation is that of what we, as agents owe to one another. In the case of Nukem, we must look at what he owes society; a type of obligation on a different scale, concerning what moral debt may arise through institutional, collective, and societal ethics. For the sake of example, we might look to something like Contractualism (i.e. Scanlon, 1996) as a theory of Hoggish's obligation, and Discourse Ethics (i.e. Habermas, 1991) as a theory of Nukem's obligation.³⁷

Seeing ethics as a relationship suggests that we ought to protect nature not for any specific value, but for many values and reasons within the environmental debate. Conservation can be seen as an obligation because the many values held by different agents, the many services provided by nature, and the many facets of change in nature brought on by humanity all hold moral authority.

In some sense this boils down the search for a conservation ethic into a trivial point. For example, rather than requiring a complex and technical argument for the realistic value of biodiversity or other ecological values that could hold down a value-centered approach, we could say that we ought to act morally towards nature for the same reasons we ought act morally, because our agency and the agency of others demands it of us. Regardless of the value of a condor, we ought to protect the condor because open social discourse has put them on the endangered species list; we ought to have put the condor on the endangered species list because of wide spread valuation, recognition of our

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³⁷ More on this to come.

collective impact, historical value, ecological relationship, lack of willingness by the moral community to accept anthropogenic extinctions, and the full myriad of reasons brought to the moral table by our many moral relationships that concern the condor.

Thinking back again to the Susitna-Watana Dam, we now have good reason to play value disagreement as it lies and take up an obligations-centered understanding. Let's consider again the case of Hoggish and Rigger. One way to understand the dam debate would be to think of the disagreement in terms of the perspectives highlighted by Hoggish and Rigger. Let's say the Salmon are the car, the shared resource. Let's say those in favor of the dam are Hoggish, those opposed are Rigger, and by damaging the car everyone gains some amount of external value (lets say everyone gets a cheeseburger). Rigger claims that there is undeniable value in the salmon for both intrinsic reasons and provisional reasons within the community. Hoggish believes he can compensate Rigger for any value loss because of the gains provided by damaging the car (salmon population). A stalemate ensues because Hoggish and Rigger fundamentally disagree. However if we reorient the ethic to be obligations-centered, the question is no longer about which value is 'correct,' but instead about permissions and restrictions. In essence, Hoggish is now asking for *permission* to degrade a shared resource by appeal to economic value. Rigger is essentially denying permission by appeal to ecological, cultural, and historical value. The debate is not about who is correct, but about what Hoggish owes Rigger with regard to the shared resource. Similarly, if we think again about Nukem, perhaps the fish are the road and Nukem is the Dam Authority. Regardless of Nukem's understanding of the road's value (i.e. population numbers, fishing yield, ecological function, intrinsic

worth), or of the resilience of that value (can it survive the dam), there may still be a public debate expressing a responsibility for maintaining certain accepted values if Nukem wants to use the road (dam the river).

While impacts to salmon may be a good reason not to dam the Susitna, debating the science of the impact does not alone make the case clear. Scientific understanding helps make an informed decision in this case, but ethical considerations ought to also be teased out, including some questions of the salmon's value and understanding the context of that value. Perhaps energy ought to be pursued over fish, perhaps not. Public debate ought to extend beyond descriptive disagreement and explore the ethics of reasoning and valuation as well.

II.IV Conclusions

Several possible objections might be levied against this position; I see three main issues that I will address here: a metaphysical problem, a practical problem, and a theoretical problem.

The Metaphysical Problem

One might argue that my entire argument is predicated on an unsupported claim that metaphysically real value either doesn't exist or doesn't matter. As I have said, I am proposing that obligations better describe, better motivate, and better reflect the ethics of conservation. But, alas, I have not explicitly argued against any particular view of value. I will bite the bullet on

this one. If value really is out there, my argument may reduce to a pragmatic, but unethical position. However, because my stance incorporates value into an ethical structure, it oughtn't matter that an obligations-based ethic doesn't address the realism of such values, because it allows for a comprehensive multidimensional and inclusive use of values. Economic value of salmon and electricity, cultural values, intrinsic values, humanistic and animalistic values can all be part of moral reasoning in favor of conserving the Susitna or developing the dam.

The Practical Problem

Still others might say that the force behind modern environmentalism has not relied so heavily on intrinsic value for no reason. Intrinsic value pulls on the heart stings of many, motivating them to action. This is true, but it equally divides and entrenches disagreements when such value isn't shared. An obligations-based approach allows for an ethic where no one is wrong to ground conservation.

Entering into a debate without the baggage of contending other sides are incorrect about their values is fundamental to moving forward in the real world. The inspiration found in environmental value theory is no less inspiration when part of an inclusive multidimensional ethical process. Many values come to light in the different perspectives on the Susitna Dam, but we need not declare a winner in the value debate.

The Theoretical Problem

If values are held as reasons within an obligations-based ethic, then one might argue that such an approach is simply a pluralistic version of value-based ethics. I don't see it as such. On one hand, the very fact that it is pluralistic makes such an approach theoretically different, but also values might not be the only reasons at play in an obligations-based ethic of conservation. For example, as I have discussed, National Parks are an instance where we have expressly adopted a place and taken on certain responsibility. Values at play in Park management may be one set of reasons for conservation, but the obligations we have regarding that place also stem *from* our adoption of it. The case of the dam again highlights a case where perhaps we ought to adopt certain responsibilities.

If we extend an obligations orientation more broadly throughout the conservation conversation, it could reorient conservation conflicts to focus on building open and honest discourse, exchange of information, and dialogue. Value is motivational, inspiring, and metaethically important, but what we owe to one another better describes the conservation agenda and could better avoid bitter conservation conflicts. We must accept a certain responsibility for the world we interact with and we must respect the values of others.

Taking on responsibilities for the natural world may be easier said than done. It is one thing to suggest that theoretically what we owe to one another is a way of understanding a more multidimensional call for conservation, it is another thing to put this in place. Fortunately obliging ourselves to nature is something we already do in certain cases and we have theoretical tools for understanding when we are succeeding. This provides a theoretical corollary to

procedural and pragmatic views on environmental deliberation, like for example, John Dryzek's view on lay citizen deliberation. Dryzek argues that non-partisan lay-persons engaging in the deliberative process can help achieve 'democratic pragmatism,' a process of interactive problem solving (Dryzek, 2005).

I am suggesting a shift in our understanding of why we ought to protect nature. My argument that value agreement is unnecessary and that obligation-centered ethics explains conservation does not speak to what out be protected in nature or how we ought to go about it. Instead, this orientation concerns why we ought to protect nature. I fully admit that an understanding of why we ought to protect the natural world—a question of applied and practical philosophy—is still one step removed from real world work. Why we ought to protect nature is the foundation for the questions of how, what, where, and so on. If we ought to protect the Susitna River and Susitna River salmon, then shifting our orientation to investigate our relationship and responsibilities regarding the Susitna would simply be more productive.

Shifting our ethical orientation would also help in the face of another aspect of the Dam debate that I have not discussed. Many people call for the dam as a 'lesser-of-two-evils.' Without the dam, some say the State will need to look for energy elsewhere, and right now the most likely alternative is a natural gall pipeline from northern Alaska through the state to the southern coast. Whether or not we ought to protect the Susitna or certain other parts of the state should not hinge on the threat of some other external value calculus. Good reasons to protect the salmon stand alone in this way. A consequentialist value-centered

ethic gets caught up in which option is worse—a topic rife with disagreement—where as an obligation-centered ethic asks what justifies one option over another.

Not only is value-centrism unnecessary for the protection of nature, but obligation-centered ethics provides a means for bringing together the wide range of values and perspectives that encompass an environmental problem into a singular integral understanding. Regulations and abiding by rules in environmental management are in essence an acceptance of obligations-centered ethics. In chapter five I will turn to rules of behavior in nature, and demonstrate how we already actively use obligations without much debate.

CHAPTER FIVE:

OBLIGATIONS AND THE PROBLEM OF ABIOTIC CONSERVATION:

THE LIFE AND TIMES OF A UTAH GOBLIN

Chapter Five

Obligations and The Problem of Abiotic Conservation: The Life and Times of a Utah Goblin

"The glories and the beauties of form, color, and sound unite in the Grand Canyon - forms unrivaled even by the mountains, colors that vie with sunsets, and sounds that span the diapason from tempest to tinkling raindrop, from cataract to bubbling fountain."

-John Wesley Powell

Introduction

In chapters three and four I argued that agent-centered obligations plausibly describe conservation and that value-centrism is problematic and intractable (the Substitution Problem offering one example of why). Here in chapter five I show how obligations already work and account for a wider range of protection in nature, accomplishing protection more easily than value-centered ethics. Obligations show how a responsibility for certain environments transcends what is in those environments.

IV.I The Death of A Goblin

A hoodoo forms when the erosion of soft rocks like sandstone or some volcanics takes a turn for the bizarre. Natural obelisks emerge over time, with a mushroom like cap of harder stone protecting a column of softer material. In the late 1920s, three intrepid cowboys were exploring central Utah when they happened upon a place like no other. Turned into a State Park in the 1960s, Goblin Valley consists of a vast field of hoodoos surrounded by towering

sandstone cliffs.³⁸ There is little water or soil, and though fascinating, the life that calls Goblin Valley home is not terribly vast, visible, abundant, or attractive. The landscape is dominated by the hoodoo 'goblins' standing each alone eroding out of once great sandstone cliffs, but together like a vast terracotta army, frozen for a brief moment in geologic time, standing watch in the Utah dessert.

Recently, in October of 2013, three Boy Scout troop leaders received national attention when they chose to topple one of these goblins. The men posted a video on the Internet of one of them heaving the monolith from its geologic platform as other cheered him on. They claim they removed it as a safety precaution, because the rock was "loose."

The video posted to Facebook shows three scout leaders amongst the goblins. One of them sings, "wiggle it, just a little bit," as another forces over the 200 million years-old rock formation. After the rock falls to the ground in defeat, the scout leader filming the geologic event points the camera on himself saying, "we have now modified Goblin Valley!... A new Goblin Valley exists with this boulder down here on the bottom." Outrage and a criminal prosecution followed. The "goblin topplers" were charged with, and pled guilty to, criminal mischief (Lang and Prettyman, 2014).

So what do we find wrong about the goblin assault? Why ought we protect these creatures of stone standing together in a landscape many would view as dead? Is it that as Scout Leaders they ought to be the sort of people who know better? Is it that the act was illegal? Is it that the act disrupted the ecosystem or environment? Is it that the act has deprived current and future

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 $^{^{38}\} http://www.stateparks.utah.gov/park/goblin-valley-state-park/about$

people from enjoying that rock, which took millions of years to form, as it was? Perhaps all of these are factors, but Goblin Valley is exactly the type of case that environmental ethics often struggles to describe. In looking to assess the ethics of conservation based on a metric out there in the world we cannot look to life-based or other common attributional theories of value because environmental axiology has largely focused on the environment as ecological—a problem for many popular theories of environmental ethics. The rock was not unique, little or no life has been affected by the topple, its shape could easily be artificially reproduced, and the rock would have eventually toppled over on its own.

Environmental ethicists cannot look to most extentionist ethics, life, biocentrism, ecocentrism, animal rights, the land ethic, or environmental virtue for an ethic that protects the goblins of Goblin Valley, as there is no life or life dependencies in question. We cannot look to deep ecology, as ecology is not called into question. We cannot look to attributes of value, as they could be replaced, restored, or naturally arbitrary. So what is left? Call the difficulty in answering this question and ascribing moral force to protecting abiotic nature the 'problem of abiotic conservation'.

Approached scientifically, conservation is often tackled within the spheres of conservation biology and ecology. But in its most general understanding, the goals of conservation encompass the protection of not just biodiversity, but geologic diversity, physical systems like rivers or glaciers, and unique geographies. Within this broader understanding of conservation, there is a gap between what aspects of nature we protect, how we protect nature, and the environmental ethics commonly used within the conservation conversation. The problem of abiotic conservation arises then not because we do not protect abiotic

spaces. In this sense it is not a technical problem, but a theoretical problem. The most popular environmental ethics called into the service of conservation—explaining, defending, inspiring, and representing the reasons and responsibilities for protecting the natural world—struggle to address the protection of *abiotic* nature.

In this chapter, I argue that recasting conservation as stemming from (non rights based) obligations regarding nature—the obligation-centered conservation ethic—rather than value—centered ethics avoids this problem of abiotic conservation. I argue this by showing that an obligation—centered conservation ethic suggests that we ought to protect abiotic nature for a variety of reasons that coalesce into implicit and explicit responsibilities and restrictions. I also suggest that social contract theory could provide a useful tool for theoretically grounding and defending this obligations—centered conservation ethic. Furthermore, and more importantly for this dissertation, the case of the conservation of abiotic nature helps illustrate how obligations are already used with great success to protect the natural world, both biotic and abiotic. While environmental theorists commonly couch questions of protecting the natural world within the complex and perpetual debates regarding intrinsic value or moral considerability, obligations often ground the laws and regulations that protect nature in the real world.

I do not introduce any further literature on obligations (though I do introduce further background on social contract theory), value, or conservation, but draw on those ideas already introduced to first, demonstrate the actuality of the problem of abiotic conservation, second, prime intuitions about obligations for protecting abiotic nature, third, show how rules and regulations are a

manifestation of these obligations already successfully protecting nature, and finally fourth, discuss the upshot of this understanding of obligation-centered conservation ethics. Obligations-centered ethics not only defend the protection of abiotic nature, but also the protection of abiotic nature in practice. This is also true for biotic nature. Rules obliging us to act with certain restrictions and regulations limiting human behavior are legal obligations, these legal obligations track moral obligations.

So far I have introduced value-centered ethics (chapter one) and obligations-centered ethics (chapter two), I have aimed to show how the difficulties in using any narrow environmental axiology struggle to provide useful guidance in the real world (chapter three), and I have argued that obligations-centered ethics are better at describing conservation (chapter four). A large part of this dissertation has so far been consumed with the dissection of value, simplification of conservation as a goal, and the theoretical abstraction of obligation as an alternative ethic. So what? How can we take any of this theoretical jibber jabber and better protect what matters in the natural world? Well, my final-call for an obligations-centered environmental ethic grounding the normative dimensions of conservation comes from how we already protect nature. Most of our protections already come from an obligations-centered ethic in action. Laws and regulations provide a structure for obligations to go to work. This view shows the practicality and success of the obligations-centered approach.

IV.II Why Ought We Protect Abiotic Nature?

Consider the following:

The Tagger

A graffiti tagger defaces your garage door with spray paint, making it

ugly, but having no effect on its function.

This is a fairly straightforward act of trespass and vandalism. Because the

garage door does not belong to the tagger, he has no right to paint on it. You as

the owner could obviously grant permission, even after the fact (if say you liked

the graffiti). But free from such permission, the tagger has no claim over private

property not belonging to him, the function of the door doesn't matter, the long

term impact doesn't matter, and even the tagger's willingness to repaint the door

would not matter before the fact. It is illegal to trespass or vandalize. It is not his

door to paint. This could be described from all sorts of ethical perspectives. One

way to understand why he oughtn't paint on the door would be to consider it

part of what we owe each other. We owe it to one another to respect property

rights because that is fundamental to a system of ethics whereby we honor one

another's agency and give moral authority to the autonomy of agents (think back

to Korsgaard and Locke).

Consider now instead:

The Eco-Tagger

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A graffiti tagger defaces the Grand Canyon with spray paint, making it ugly, but having no effect on any life forms in the ecosystem.

Many would agree that such an act is wrong.

Approximately 25 animal species that are listed as endangered or threatened by the federal, state of Arizona, or Navajo governments, call the Grand Canyon home (NPS, 2003). These species include the charismatic and famous California Condor, the environmentally notorious Humpback Chub, and the lesser known, but ecologically vital Kanab Ambersnail. Each of these animals may amaze, amuse, and impress many. Each has been deemed 'valuable' in their addition to an endangered species list. Each is rare, perhaps even beautiful. Despite such value, I doubt many of the five million some odd people that travel to the middle of the Arizona dessert to visit the Grand Canyon each year do so for the chance at glimpsing the Humpback Chub or Northern Leopard Frog.

The Grand Canyon is just that, *grand*. Life, ecology, and the biotic community say little of the amazement and awe so many find in the geology, physicality, and geography of the dessert and canyons of the American Southwest. This is the problem of abiotic conservation. Any environmental ethic that describes protecting nature as protecting value derives from life, biodiversity, or ecology—as many theories of environmental ethics do—then our reasons for protecting the type of geologic grandeur found in the Grand Canyon are left outside the scope of environmental ethics. It is clear that the eco-tagger oughtn't paint in the canyon, but we cannot rely on life to explain why. This is

not a challenge for our intuitions, or ethical theory more broadly, but is a problem for popular modern theories of environmental ethics.

The grandeur so valued in the Grand Canyon is its natural state. This is not to say that the Canyon does not have a rich and remarkable human history or that there is not currently any human influence. Rather, the experience of the Grand Canyon that we care about, both as individuals visiting the Canyon, but also as a society that choses to protect that place as a National Park, is an experience of physical nature, the force of water and gravity carving out a landscape over millions of years. The human impacts and history of the place do not influence the relationship that we have to the Canyon as a Park set aside because of its physical geography. Though historical influences on that geography give us insights into the rich human history of the Colorado River, and while modern impacts provide access to public enjoyment of the Park, graffiti on the walls of this natural cathedral of stone impedes the experience of the place, threatens the physical geography of the canyon walls, and disregards the collective responsibility for the space that is held as a national commons.

Similar to the case of the tagger, the eco-tagger does not alone own the canyon wall. He has no claim to its surface. In the case of the tagger, some may want to say that as the owner of the garage you have some right over the garage, but in the case of the canyon it is less clear if there is a subject of right. Instead, because we have collective responsibility for the Canyon, we also have a collective claim to decide on permissions and restrictions within the Canyon. The Canyon does not need to be morally considerable, and no specific collective needs to establish a right to the canyon; rather, we as a society have a duty based obligation stemming from our own explicit undertaking concerning the Grand

Canyon as a Park. The National Park Service would straightforwardly consider the eco-tagger's graffiti an act of vandalism, just as the same as the owner of the garage door would of the tagger. Without permission, the eco-tagger owes it to the rest of us to respect the canyon as managed by the Park Service because his actions constitute a failure of our collective social duty to protect the Canyon. If the eco-tagger, as a U.S. citizen and hence a shareholder in the National Park, feels that his perspective and desired use of the Park is not being respected, then the eco-tagger could ask for permission or seek to change the management regime within the Park. Free from such permission, the act is illegal and wrong.

Consider now:

Clanksy

Famed graffiti artist Clanksy paints on the walls of a rarely visited side canyon within Grand Canyon National Park. He does not have permission from the Park Service to do so. This particular work by Clanksy is considered one of the greatest modern masterpieces of contemporary art.

This example is different in that Clanksy does not obviously degrade the canyon and many people would likely value and praise the artwork, though many would still agree such an act as vandalism. The masterpiece might in fact make the canyon more beautiful, more valuable, and more desirable as a destination. The disconnect between value as metaphysically real and value as a reason within environmental ethics comes to light because despite any added

value, it is still illegal to paint on the canyon walls. Clanksy's obligation regarding his behavior within the Park is not contingent on personal attitudes towards Park rules, or personal talent and ability to add value.

Suppose instead Clanksy painted on private property without permission from the landowner. That landowner may enjoy the work or he may hate the work, he may be grateful or incredulous. But the moral force of Clanksy's trespass is independent of his work's beauty. His act is illegal. The landowner may choose to give up his right and allow Clanksy to paint, even after-the-fact, but it is up to the landowner, not to Clanksy. Symmetrically in the case of the canyon, Clanksy's social duty depends upon the justification for that duty. The National Park Service is a proxy for U.S. society as the 'landowner' of the canyon and might accept justification and absolve Clansky of any responsibility to remediate, undo, or compensate for his actions.

On one hand, the value of Clanksy's masterpiece doesn't matter because it does not have anything to do with Clanksy's legal obligations. Regardless of any agreement about the worth of the masterpiece, the act of painting it without permission is just that, impermissible. On the other hand, many would likely view Clanksy's work as very different then the actions of the eco-tagger. Value matters, but not as a catchall right-or-wrong assessment of environmental problems. Laws and regulations track moral obligations, but an obligation-centered ethic diverges from our legal framework in this respect. Laws already reflect the obligations orientation. An obligation-centered ethic brings a deeper understanding of these obligations to light, and at times may suggests leniency, exception, or additional restriction for specific cases. If Clanksy painted over an Ancestral Puebloan petroglyph, many would agree that this would make his

wrongdoing more severe. On the other hand, if his masterpiece did not detract from visitor experience, was largely accepted as an amazing work of art, and lauded by many, it is not entirely improbable that the Park Service might allow it to remain, or at least the Park Service would have a process by which Clanksy could obtain permission. If he made his intensions known and went through the proper channels and permitting process, we might instead debate the aesthetics of his art, but not the morality of his actions. The reasons that underlay our obligations involve value, but also incorporate a wide breadth of perspective, context, prior arrangement, and agreement.

This case is more real than it may seem. Well-known contemporary artist Christo has done several installations in public outdoor spaces. He recently went through a lengthy legal process that went all the way up to the Colorado Supreme Court over an art piece called *Over The River*. The installation plan is to drape large swaths of cloth across the Arkansas River on Colorado State Park lands south of Salida, Colorado. Christo did not simply go out to the river and go ahead with the project. Instead he has gone through years of adjudication to get permission through a public process. While different people might reject or see different value in his art (or simply disagree on whether or not its any good), it seems like what separates his projects from moral trespass is permission.

We protect abiotic nature through obligations like the protection granted to National Parks. The agreed upon restrictions on human behavior are not contingent on specific agreements on value. The canyon wall does not have standing; it cannot make a moral claim in this case. The canyon wall may have intrinsic value, or may be worthless rock, lifelessly strewn about the dessert. The Park, as an institution, uses a structure of obligation to side step any

disagreements in debates about value or standing by placing rules and regulations on our use and misuse. Laws work as a proxy for an ethical theory of right and wrong, and oblige us to take certain responsibilities for specific places, like parks, and restrict behaviors in those places, like vandalism. This works fairly well in many cases.

For that matter, we protect *life* through obligations as well.

Consider the following:

The Poacher

Suppose a poacher shoots one of the few California Condors reintroduced to the Grand Canyon. These birds are federally protected under the Endangered Species Act, there is no legal hunting season, and it is currently illegal to discharge a firearm within the boundaries of Grand Canyon National Park

While life, the value of biodiversity or ecological function, or any other ideas related to intrinsic value and standing might be largely responsible for motivating laws like the Endangered Species Act, or have inspired the establishment of National Parks, these factors are not monolithic, and do not directly move action in most cases. Instead, the laws that follow from such reasons compel behavior through rules and regulations.

Obligations reflect moral judgment on certain actions that coalesce to cause certain outcomes. The justification of those actions comes out of the myriad

of reasons one might use to pursue different paths. Environmental value provides many reasons in this justificatory framework, but environmental value is not ultimately the deciding factor in many real world cases. Again, legal obligations track moral obligations and offer the most common real world path to environmental protection. Looking back at Goblin Valley, legal obligations regarding Goblin Valley State Park avoid the need for agreement on hoodoo value. This avoids the problem of abiotic conservation and demonstrates the breadth of protection obligation-centered ethics is capable of.

IV.III What we owe the Goblins

Roughly 180 miles north of the Grand Canyon, in the middle of the remote San Rafael Dessert, Goblin Valley State Park both protects and offers a chance for visitors to see, explore, and enjoy a unique landscape, full of dessert pixies frozen in stone.

The abiotic home of the goblin calls for an ethic of abiotic conservation, but already operates on a de facto regime of obligations-based abiotic conservation under Utah Law. Goblin Valley State Park lists basic regulations in its brochure, saying of vandalism that, "it is unlawful to mutilate or deface any natural or constructed feature or structure. Please help keep our parks beautiful" (Utah State Parks, 2014). Title 76 chapter 6 part one section 106 subsection 2 line C of the Utah criminal code states that a person commits criminal mischief if that person, "intentionally damages, defaces, or destroys the property of another" (Utah Criminal Code). Line B states that criminal mischief also includes any act that "recklessly causes or threatens a substantial interruption or impairment of

any critical infrastructure" (Utah Criminal Code). "Critical infrastructure" includes "government operations and services" (Utah Criminal Code, Subsection 1, line i). This is the law under which the man who toppled the hoodoo and the man who filmed and praised the toppling were prosecuted. The law uses monetary value of damages caused to deem the degree of Criminal Mischief, but no understanding of value makes the act illegal--the law makes the act illegal. This law essentially established a social claim against anyone who breaks it. The law creates and reflects an obligation to abide by certain rules in the Park. Aldo Leopold famously said that ecologically speaking an ethics is, "a limitation on freedom of action in the struggle for existence," (Leopold, 1949). Laws codify restrictions on behavior, and ethics establish the normativity behind such restrictions. The men pled guilty (one to criminal mischief and one to attempted criminal mischief) and received a large fine.

This prosecution was not contentious. The guilt of the two men was not in question. Deputy Director of Utah State Parks Jeff Rasmussen said of the vandalism, "obviously, we're very concerned and upset that somebody would come and destroy this natural wonder that took millions of years to be formed," (Watkins, 2013); Utah State Parks spokesman Eugene Swalberg said, "It gives you a pit in your stomach...There seems to be a lot of happiness and joy with the individuals doing this, and it's not right. This is not what you do at a natural scenic area" (Watkins, 2013). The intuitive focus expressed here is not about what was destroyed but rather about "what you do at a natural scenic area." The viral video swept across the Internet. Seeing the goblin fall solicited a wide range of not-so polite comments that largely voiced an opinion that toppling over the hoodoo was a stupid, inappropriate act. Though the reasons behind these views

were likely wide ranging, the sentiment that the act was wrong needn't be dissected for us to agree that it was wrong. The system of regulations in place was a clear and swift proxy for a comprehensive ethic of protection. While the legal obligation at play is not the same as the moral obligation, there is symmetry between the two.

The attraction of Goblin Valley, the awe found in the Goblins, and the strange story that the geology of the Valley tells, all compelled the people and legislature of Utah to set aside Goblin Valley with special restrictions on use and visitation. Goblin Valley offers a "showcase of geologic history" (Utah State Parks, 2015). In the early 1950s, the popularity of the park grew as early accounts and photography of the unique physical geography gained awareness. The state of Utah acquired the land and made it a State Park in the early 1960s to protect Goblin Valley. As a State Park, the area is now protected for public enjoyment and preservation of the area's geology. By becoming a Park, the Valley was adopted by the State of Utah, giving the state a special responsibility to protect it. Visitors in turn now have unique obligations to Goblin Valley.

If life were all that is needed to ground a conservation ethic in Goblin Valley, nothing would be wrong about knocking over all of the goblins and consequently destroying the very thing that makes the Valley special. This again is the problem of abiotic conservation. It is clear that this place is worthy of protection, it is actively being protected, but environmental ethics provides few usable tools for understanding the normative dimensions of this protection.

Toppling one of the rock formations, which make the Valley so special, was essentially like the eco-tagger choosing to deface a canyon wall. Even if there were reasons of safety behind the action, it was not theirs to topple. Like Clanksy

and his masterpiece, the downed Goblin may have added value to the Valley by making it safer, but without permission this reason does not override the obligation to respect the collective ownership and autonomy of the Park as an institution. Would you throw out a chair at a restaurant if you found out it had a loose leg, or would you inform the owners? It was not their safety concern to address.

Reframing the environmental values at play in Goblin Valley as reasons within an obligations orientation that is manifested within the legal structure regulating behavior in the Valley avoids the problem of abiotic conservation. The ecosystem, biodiversity, or biotic system present in Goblin Valley did little to inspire the Parks establishment, or to fuel outrage over the dismembered goblin. Instead a system that clearly defines liability, a tacit agreement of visitation and use, and a clear system of control protect the abiotic nature within Goblin Valley. This legal framework mirrors an obligations-centered ethic by incorporating multiple value perspectives, responsibilities, consensus, and agreement into a system of right and wrong. While Utah has codified this system (sometimes imperfectly), the moral foundation is an ethic that similarly incorporates a wide range of value and agreement. That is an obligation-centered conservation ethic.

This may seem like I am conflating ethics with policy or law. Law is ultimately a form of social agreement. While what is legal and what is right are not always the same, and while a legal obligation is not necessarily a moral obligation, the orientation towards responsibility and communal obligation within the legal frameworks protecting places like Goblin Valley have an aligned ethical foundation.

While the ethical theory behind law and policy is rarely explicit, there is an implied agreement that the process and restrictions that arise out of legal obligations ought to be respected. This in turn implies that obligations are doing real ethical work. There are many ways to understand how this might be the case; possibly the simplest ethical understanding would be to consider the agreement itself, arising through social norms, to be ascribing the ethical status of those norms. This is ethical arena of social contract theory.

All social contract theories of ethics ground morality in some form of interpersonal agreement among agents. Depending on the specific approach, this agreement may be tacit, explicit, hypothetical, or otherwise. While many ethical theories construct ethics from rather enigmatic metaphysical and metaethical grounds (like life is good or pain is bad), a common thread, and challenge, that makes contract approaches appealing is that they explain ethics without such an evasive foundation. The social contract arises from self-interested agents and those agents' reasonability. While this chapter does not rely on contract theory, or aim to defend it, I bring it up as an example of how an agreement about norms could be said to give moral force to the legal obligations in a place like Goblin Valley. An obligations-centered conservation ethic could incorporate social contract theory as the basis for this jump.³⁹ Social contract theories in the traditions of Thomas Hobbes, Jean-Jacques Rousseau, and Immanuel Kant offer an alternative approach to ethics that has been largely left out of the environment realm.

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³⁹ I fully understand that I am failing to defend this idea. Such defense would be beyond the scope of this project; I am just descriptively offering it up as an option.

Contractualism can be traced back to the social contract discourse of the 17th, 18th, and 19th centuries between Hobbes, John Locke, and Rousseau (and later Kant). This being said, the tradition has its roots (like most philosophy) in a Socratic dialogue, Plato's *Republic*. While all social contract theories deem ethics to be some sort of agreement between moral agents, rather than the evaluation of world states or rules reflecting values in the world, Hobbes and Rousseau offer the foundation for two divergent approaches (contractarianism and contractualism respectively). Hobbesian ethics argues that morality is reducible to self-interest alone. People will individually be better off if they agree to abide by certain rules. Hobbes developed this view by looking at humans in a "state of nature," a "war of all against all" (Hobbes, 2010). In such a circumstance, Hobbes contends that moral convention would be naturally agreed upon as a means of reciprocally protecting individual autonomy (Hobbes, 2010): you oughtn't topple hoodoos in Goblin Valley, because I want to enjoy them; I oughtn't topple hoodoos, because you enjoy them.

Such a view has been further developed into a contemporary view of *contractarianism*. David Gauthier developed the most notable modern formulation of contractarianism in his work *Morals By Agreement* (Gauthier, 1986). On his view, morality is merely a matter or rationality, though he thinks that a decision theoretic rational choice may expand individual prudence to a broader understanding of self-interest. Toppling hoodoos in Goblin Valley is then wrong because we have agreed that such behavior is impermissible in a State Park; why we came to such agreement does not matter for the end result—hoodoo toppling—to be wrong.

Contractualism differs from this approach by grounding ethics in not just self-interest, but also in a natural (perhaps intrinsic) aspect of moral agency, reason. Kant and Rousseau both understand persons as rational and reasonable agents of morality, and also contend that justifying one's actions is a basic requirement of that agency (similar to Karsgaard), particularly in an interactive society. Contractualism understands ethics to be an agreement between moral agents that is founded in both the self-interested individual and that individual's ability to provide reasons for their actions (Darwall, 2003). On such a view then, you oughtn't topple the hoodoo in Goblin Valley, because your legal obligation not to do so reflects good justificatory reasons that when appealed to, other agents would agree do not permit such behavior. Similarly, when Clanksy painted the canyon wall, his artwork is an act of vandalism because of the norms established through the moral community.

In the past half century contractualism (as well as Kantianism) has gained popularity. Various formulations of the contract, such as those proposed by John Rawls and T.M. Scanlon, have helped advance the view. While Rawls' work primarily concerns political philosophy and issues of justice, Scanlon has aimed to understand the individual normative dimension of this theory. For this reason, contractualism is now largely synonymous with the view put forward by Scanlon in *What We Owe To Each Other* (Scanlon, 1996). His view claims that an act is wrong if other agents have reasonable grounds for objecting to such an action (Scanlon, 1996. 4). This differs from both Rawls' and Kant's view by focusing on wrongness rather than rightness (Darwall, 2003). Rawls and Kant both claim to some extent that an act is right if it could be made universal (Kant, 1993; Rawls 2001). Scanlon, taking a more liberal view, suggests that rightness is

simply that which is not wrong, and wrongness has nothing to do with universalizability, but rather reasons of individuals for rejecting principles of action that could permit certain behavior. So, then, do not topple hoodoos in Goblin Valley, because other agents could hypothetically reject a principle allowing the destruction of the hoodoo by appeal to reasons inherent in out creation of the State Park.

Contractualist type approaches have been suggested as a basis for certain aspects of environmental ethics before. Peter Carruthers, for instance, presents a contractualist theory of animal philosophy in his work *The Animals Issue* (Carruthers, 1992; also see Talbert, 2006 for more on Scanlon and animal ethics). Looking at environmental justice and environmental ethics more broadly, Peter Wenz, Daniel Thero, and others have looked to Rawls (Wenz, 1988; Thero, 1995; also see Manning, 81; Singer, 88). Rawls himself alluded to such an approach in *Justice as Fairness*, writing, "[A] bill may come before the legislature that allots public funds to protect the beauty of nature in certain places...While come arguments in favor may rest on political values...[political liberalism] does not rule out as a reason the beauty of nature as such or the good of wildlife achieved by protecting its habitat...these matters may appropriately be put to a vote" (Rawls, 2001, p.152). These approaches have not yet comprehensively dealt with contractualism in its contemporary form, or as it relates to global environmental change.

Social contract theory could provide many possible paths for obligationscentered environmental ethics because at the root of the contract lies a shift away from the restock of value to justification and rational for our behavior. I do not intend to defend any particular theory, but to show that such an approach could provide further theoretical muster to an obligations orientation. Obligations already present in our legal process do not themselves often garner much controversy. Though the laws obliging us often cause heated debate, few people argue that we should simply break the law without aiming to change it. This suggests that a contentious legal obligation, without any debate over the dictating law tracks an agreed upon notion justifying some restriction. In this case, the restriction that one ought not topple hoodoos in Goblin Valley.

IV.IV Conclusions

Disagreement and debate over value have created a divisive conflict over whether or not to develop the Susitna Dam. A similar debate could never get off the ground just miles west in Denali National Park. While a debate rages on over how to manage wolves outside of Denali National Park, there is no symmetrical debate within the Park. The obligations orientation behind many well-known conservation debates already helps to structure many environmental issues around well-defined policies and regulations. The debate then becomes about the policies and regulations, rather than about the underlying values.

Within environmental ethics, debates concerning the nature on intrinsic value, attributes and qualities that source intrinsic value, and moral status have been fodder for a plethora of innovative ideas, but done little to advance real world environmental protection. While theories that rely on life and value are inspiring, the problem of abiotic conservation is just one example of the issues that stem from environmental ethics that rely upon value realism.

Goblin Valley, as a State Park, is an institution that aims to provide access for public use, protect the natural environment, and to protect the Valley from despoilment. There is no contention over this mission. People generally agree that this is a good thing. An infraction against this protection is then a simple disregard for the obligations held by anyone who visits Goblin Valley. The case of the goblin topple was not a challenge for our system of management, but because of the problem of abiotic conservation, presents a challenge for popular theories of environmental ethics. An obligation-centered ethic not only avoids the problem of abiotic conservation, but also reveals the normative foundation of the management regime we already use.

There are several possible objections to my argument as presented here. Three pressing possible objections would question the theoretical strength of obligations, the practical ethics behind my characterization of out laws, and the actuality of the problem of abiotic conservation as I have presented it. I will address these now in turn.

A Theoretical Challenge

Some might worry that my characterization of obligations is theoretically arbitrary. Perhaps a more incredible landscape exists next to Goblin Valley: ought it be okay to destroy it simply because it isn't a park? Why is Clanksy's work vandalism in the Grand Canyon, but anything more than fifty years old (as prescribed the Antiquities Act), whether it be ancient pictographs or the etchings of miners from 100 years ago is considered a cultural artifact? It might seem easy to question a position that seems theoretically arbitrary (as I have questions

value-centered views for this exact reason). Obligation-centered ethics survive this critique by accepting one intuitive weakness. Under an obligation-centered view, prior to the establishment of Goblin Valley State Park, I have to bite the bullet that it would not have been wrong to topple over the hoodoo. However, though this seems unintuitive, an obligations orientation would also suggest that before the Park's establishment there were reasons for pushing for protection of the Valley as a Park, which would then prevent such acts. Similarly, the context of Clanksy and the context of Ancestral Puebloans, etching into the stone is very different. If the rock of the canyon walls has an innate intrinsic value and if Clanksy's work is wrong, so too it seems would be the work of the canyon's ancient inhabitants, but context matters for fully incorporating the vast array of situational values and responsibilities.

Laws Aren't Ethics

Some might also worry that while I have described the legal regime of protection for abiotic nature, this simply does not track what really matters. This is a strong objection. I introduced the idea of a social contract, but did not defend it, and perhaps this is wrong. But, again, my position is primarily practical. It may be the case that rocks have intrinsic value for some yet-to-be fully understood theoretical reasons, but an obligations-centered ethic of conservation provides a tool for understanding the way in which we currently protect nature.

This may sounds like I am dodging the question, but legal obligation already in place as our regulatory structure do not necessarily have to always track all 'real' ethical obligations for a theoretical obligations orientation on how

we understand conservation to do work. In the case of vandalism in public commons, the analogy seems well adept.

We Already Know to Protect Abiotic Nature

Finally, one might argue that I am simply mischaracterizing popular environmental ethics, and there is not problem of abiotic conservation. One might say, for instance, that while biocentric and ecocentric views provide an understanding of environmental ethics with respect to life, environmental aesthetics and other branches of environmental philosophy provide the tools for understanding why we ought to protect abiotic nature and I have simply ignored these views. Well, I agree with this criticism. However, I have not argued that there are no tools for understanding why we should protect abiotic nature, I have argued that *popular views of environmental ethics in the conservation debate* do not adequately address why we ought to protect abiotic nature. My intention with looking into obligation-centered conservation ethics is to suggest that obligations work, and because they work in a way that also encompasses biotic conservation, the obligation-centered approach may be more palpable in the conservation world were other philosophical tools like environmental aesthetics have been already largely brushed aside.

Abiotic nature inspires and intrigues much like biotic nature. We already protect abiotic nature in many instances very well, the many geologic examples of the Southwest demonstrating this. We also fail to protect abiotic nature in other cases. For example, glacier retreat in North America is threatening vast and

amazing bastions of abiotic nature. Argentina in 2010 passed the Argentine National Glaciers Act, setting a minimum standard for the preservation of glacial and periglacial environments (Argentine national glacier act, 2010). This type of forward thinking conservation that relies on the success with which we have protected biotic nature with regulations can be done.

We can and do protect abiotic nature through the use of obligations oriented regulatory frameworks. One upshot of this view, beyond the avoidance of the problem of abiotic conservation, is that an obligations orientation to our conservation ethics can also be seen in the laws and policies that protect biodiversity, species, and ecosystems. The Endangered Species Act, the Wilderness Act, The Organic Act, The Marine Mammals Protection Act, the countless state regulations on hunting and fishing, the U.S. Fish and Wildlife Service rules and controls on the animal trade all provide examples of our society taking collective responsibility for biotic nature, and in turn, create specific legal obligations to ensure the conservation of biotic and abiotic nature.

These regulations often work, but also have failed in many instances.

Developing an obligation-centered ethic would help provide the tools for critiquing and improving these policies. We can create obligations within our legal structure and adjust obligations within our legal structure to reflect a more comprehensive understanding of the many reasons for protecting the natural world than a value-centered view allows for. We already do this, which proves that we can do this.

CONCLUSIONS

Conclusions

"The Integral paradigm will inherently be critical of those approaches that are, by comparison, partial, narrow, shallow, less encompassing, then integrative"

-Ken Wilbur

Every material thing in our lives is either mined or grown. A mineralogy professor in college once began class with this reminder, defending resource extraction to all of us young idealistic environmental scientists (at that time I was a geology major). As he continued, I took his point to be that it is easy to forget about the good *reasons* for taking from nature. It would be entirely unproductive to suggest that we never ever mine; instead, an examination of the reasons for mining in any particular case ought be the focus of our attention. Environmental value pulls on the environmental heartstrings inherited from a romantic age, but in order to care about the natural world, and in order to move forward with environmental conservation in cases of conflict, we needn't agree on value realism. Careful consideration of the moral claims held against us suggests that obligations-based reasoning can account for, defend, and motivate nature conservation. Our obligations to protect nature stem from many reasons validated by the moral community.

To conclude this dissertation, I will synthesize the main argument and conclusions within the preceding chapters. I will discuss the implications and limitations of my thesis and argument, tying in the many themes and ideas with my central thesis. Finally, I will discuss the upshot of the ideas discussed in the preceding chapters and discuss what work I hope to continue out of this dissertation. This work has not been a comprehensive look at the ethics of environmental conservation. Instead, I hope to have demonstrated a greater need

for environmental ethics in the conservation arena and shown the plausibility of an often-overlooked obligations approach.

Looking Backward

As I reflect on my dissertation process I recognize that this is not a philosophy dissertation, though it has been primarily and necessarily philosophical. This dissertation is a work specifically in applied environmental ethics. The great challenge for environmental studies is to bring together different disciplines without ending up a mile wide and an inch deep. My chapters have been intentionally broad while also providing a rich and pointed work of practical applied ethics—broad in my ecological, political, and practical discussion, while deep in my theoretical excavation. I hope to have engaged the interdisciplinary heart of environmental studies by using the tools of philosophy to better understand the normative dimensions of conservation in the real world.

Obligations describe the normativity of conservation. I have shown that an obligations-centered ethic better suits the conservation discourse by providing a more adaptive tool in line with the contemporary evolution in conservation biology and ecosystem management as well as theoretically describing a forward looking call to protect nature. This more adaptive tool shows that we ought to protect nature for a variety of reasons. Successful conservation efforts require messy compromise, and narrow value-centered approaches prevent most solutions that are not win-lose from gaining traction. Obligations provide an integral, comprehensive problem orientation and can therefore ground a cooperative solution formation to conservation conflict.

My chapters have shown that protecting nature to protect value in nature opens up a can of metaphysical worms and disagreement that divides stakeholders and breeds conservation conflict. I have shown how an obligations orientation avoids problems like commensurability or the Substitution Problem and side steps value calculus. Multiple values can be reasons within a conservation debate, and those values needn't be equated or compared with a common value-unit to have force.

Allowing value to be more multidimensional defends the hierarchical necessities of conservation programs. For example, sometimes in the real world we have to save the whale before the snail. We may actually have an obligation to prioritize the conservation of some charismatic megafauna because such animals occupy a different social space. Charismatic and uncharismatic species that share similar ecosystem interactions, or attributes like sentience and life make prioritizing one over the other theoretically difficult with a value-centered ethic. But obligations can arise for social reasons, widely accepted preference, and explicit taking on of responsibility, avoiding any challenge of prioritization. Upshots like this further demonstrate practical benefits of the obligations approach.

Obligations are more inclusive because they avoid common problems, allow for compromise, look for win-win solutions, and plausibly describe why we ought to protect nature without needing any metaphysical agreement on what has value and why. Chapters three, four, and five used case-studies to illustrate theoretical points while helping build a more practically grounded ethical conversation. Each case demonstrated certain philosophical dimensions of value in conservation ethics. Each chapter did not aim to comprehensively dissect these cases, but rather aimed to dissect those philosophical problems and solutions represented in each case.

The management of Denali wolves discussed in chapter three helped demonstrate the breadth of reasons at play in conservation conflicts. By showing how values like 'viewability' or 'huntability' are overused, chapter three illustrated why a focus on specific understandings of value cause division, while obligations can help build win-win solutions. The wolf management case was used to forward both a theoretical and a practical thesis:

Theoretical point: Environmental value is problematic when held as a narrow reality and used as an ethical basis for conservation

Practical point: We have an obligation to protect the wolves of Denali because of the responsibility for them and their ecosystem that we have already taken on.

The Substitution Problem described in chapter three demonstrated one example of the theoretical challenges that result from value-centered ethics driving environmental protection. Chapter three highlighted the conflict such problems breed in real world conservation debates. The historical, cultural, and social context of Denali National Park offered an expansive understanding of wolves that is not captured by the debate's focus on viewability or hunting. We have already agreed to protect these animals, pragmatically using the National Park System to do so. This demonstrated a responsibility that wholly avoids the substitution problem. Discourse has already adjudicated amongst the wide spectrum of reasons to take on the wildlife of Denali as a ward of the public. The Organic Act—establishing the National Park Service in 1915—provided a means for this obligation to be legally codified, but is no longer proving adequate.

Turning to narrow conceptions of the wolves' value to motivate a protection leads to a conservation conflict that can only have one correct side.

The Susitna Dam conservation debate discussed in chapter four further demonstrated the wooly nature of environmental value, because it is such a complex issue and impossible to pin down axiologically. The conservation question that has been thrust into the Susitna Dam debate does not need agreement on a specific morally deciding value theory. Often real world human projects move forward with many theories of value in play, helping to demonstrate a theoretical complexity in our conservation ethic. Chapter four used the Susitna case as a foundation for describing conservation as fundamentally an obligation stemming from intersubjective reasoning. This involved two theoretical theses and one practical suggestion:

Theoretical point I: Not only is value problematic, but we don't need it—
or more specifically we don't need to agree on specific narrow definitions of
value—to provide ethical reasons for conservation

Theoretical point II: Obligations regarding the natural world do a good job of describing and/or explaining conservation.

Practical point: Cases like the dam would benefit greatly from shifting the discourse of value in favor of a discourse of obligation.

If we must get all stakeholders to agree on what has value in nature and why before moving forward with any conservation effort, then protecting the natural world will be a doomed pursuit. Instead, obligations-centered ethics accounts for conservation without need for such agreement. This suggests that in

cases like that that of the Susitna, rather than say it's not worth it to build the dam, we can use the diverse subjective values at play to try and find a positive account of why we should protect, i.e. it ought be a Park, Monument, Wilderness Area, etc.

My final case study demonstrated the plausibility of an obligations orientation. Chapter five highlighted a case where obligations already work as an ethic governing the protection of nature. This chapter's strength was in showing how obligations work specifically in a case where value-centered ethics would struggle to accord value, because Goblin Valley lacks many of the significant ecological factors often leaned upon in conservation ethics. A legal framework of obligation avoids the definition of value in this case, something that would otherwise be a difficult hurdle for a place like Goblin Valley because its significance stems from abiotic aspects of the environment and most theories of environmental value rely heavily on life or biotic interactions to describe value. One upshot of this approach is also to avoid the Conserving Problem of Abiotic Nature. The discussion of symmetry between legal and moral obligations and Goblin Valley demonstrated one theoretical and one practical thesis:

Theoretical point: Obligations explain/theoretically defend a wider range of needs than value-centered ethics, because it can account for cases like abiotic nature without eroding the importance of biotic nature.

Practical point: Obligations are already successfully employed; legal obligations have provided a framework for implementing moral obligations in the real world.

To recap, I have argued:

- 1. Environmental ethics has not provided tools for understanding most conservation calls or efforts beyond an ethics that suggests we ought to protect nature to protect value in nature. Such values have often been assumed to be objective, discoverable, and definable—a large normative assumption common in the conservation and environmental ethics conversation. This was defended throughout this dissertation but primarily in chapters one and two, appealing to the historic focus of environmental ethics and juxtaposing this focus with current discourse in ecology and currents needs within conservation.
- 2. Obligation-centered ethics intuitively describes a broader range of conservation activity than value-centered ethics. Additionally, we already often draw upon obligations to actively protect the natural world in practice. I defended these premises primarily in chapters two and four both by presenting obligations-centered ethics as an option and through a series of thought experiments that show such an option does not betray a call to protect nature, but in fact promotes this call. I also argue for this premise in chapter five by showing how legal obligations often track moral obligations.
- 3. Narrowly construing natural value as responsible for our conservation imperative both restricts the scope of conservation and causes theoretical challenges at the core of age-old environmental debates

(over the likes of intrinsic value and moral considerability). I demonstrated this premise first through historical analysis and discussion of past work. I also argued for this premise by demonstrated the connection between value-centered ethics and the Substitution Problem—primarily using the management of Denali wolves to show how much is missing from an ethical understanding that relies primarily on environmental axiology. Chapter four also argued that beyond the problems caused by value realism, conservation simply does not need axiological agreement in order to get off the ground.

- 4. Real-world conservation comes out of messy compromises, hierarchical priorities, anthropocentric preferences, and a myriad of personal, interpersonal, and social reasoning about the natural world. This was alluded to throughout this dissertation, but each of my three cases helped demonstrate how obligations can ground the protection of nature by adaptively and fluidly incorporating anthropocentrism and compromise with the protection of nature.
- 5. Therefore, obligations-centered conservation ethics provides a plausible alternative account of why and how we ought to protect the natural world.

This thesis and its arguments presented one understanding of the normative foundations of conservation. This analysis has characterized a normative

assumption in conservation ethics, shown that assumption to be problematic, and offered an alternative ethical foundation for understanding why protect nature. An obligation-centered approach is extensive, plausible, and useful, while also avoiding theoretical pitfalls of more common value-centered approaches.

Limitations

There are three major problems I see facing the obligation-centered approach I have laid out. There is a practical issue, a theoretical problem, and a metatheoretical problem. Each of these presents an interesting hurdle for future work, but none erode the ultimate pragmatic position an obligations-centered approach provides. The practical problem concerns the usefulness and uptake of an obligations-centered ethic within the conservation conversation. The theoretical problem concerns the foundations and specific ethical formation of an obligations-centered approach. The metatheoretical problem concerns a major assumption on which I have proceeded—that value realism oughtn't practically matter regardless of its reality. I will briefly discuss each of these in turn.

One might question the use of a theory driven approach to the normativity of conservation. It would be very fair to ask what an obligations-centered ethic actually does for the conservation movement? Or, how can we actually use this theory to do anything? I would like to separate these questions into two parts: first, there is a general question about environmental ethics as a whole, and second, there is a specific question about the approach to conservation ethics that I have defended here. While it is fair to ask what we can

do with this theory and critique, ethics is a theoretical pursuit offering theoretical guidance, even when applied to real world matters. I do not mean to pass the buck, but instead lean on the division of academic labor. It may be the case that environmental ethics is practically removed from ground level environmentalism and environmental protection, but the ideas and discussion of right and wrong in the conservation arena filter through to the ideas and discussion within the policy realm, the scientific realm, and the activism realm. In the same way that philosophical work on theories of justice do not directly dictate ground level change but instead inform a new understanding that can in some cases ground a new broader conversation, environmental ethics is a practical ethic that aims to dissect the assumptions, understandings, and perspectives within the theoretical space of environmental studies. My hope is that an obligations-centered conservation ethic provides a tool for understanding conflicts in nature conservation in a new way. This is ultimately a different task than changing policy or behavior. I strongly believe that an active ethics conversation impacts policy and behavior, but I also understand that this impact is indirect.

One might still be concerned as to how an obligations-centered ethic can be used specifically. I hope my perspective expands the way in which theorists understand and discuss conservation. I hope an obligations-centered approach gives new language and theoretical backing to the discourse amongst conservation practitioners. These are all hopes; ultimately, I don't know.

Beyond this practical level, there may be concern that I have not defended a specific enough theory of obligations-centered conservation ethics and that I have not grounded this approach in a specific enough ethical theory. To this, I

agree. Because value-centered ethics have implicitly dominated the environmental ethics conversation, this dissertation focused on defending an obligations orientation as an intuitive, plausible, and practical ethic without delving into the narrow type of obligations theory. I hope to continue this work by using contractualist ethical theory to understand specific obligations regarding nature. I have hinted at a contractualist, second-personal neo-Kantian obligations theory several times throughout this dissertation. I think that unclear theoretical foundations of this approach can be cleared up by further work in this area.

The bullet that I must bite here won't sit well with many in the environmental community. Many would say that an obligations-centered approach is necessarily anthropocentric. I think this rests on a misunderstanding. If normativity arises through person, interpersonal, and social relationships, then such an approach is necessarily anthropogenic (but not anthropocentric). That is to say, normativity derives from agency and reason, but can be established to practically non-anthropocentric ends.

Finally, as I have mentioned many times throughout this dissertation, I have ignored the major metaethical problem presented by value. Is value real? Is value a metaphysical property? If so, then everything I have said is ethically bunk. Or is it? I have implied that I ignore the metaphysical question of value because it's a wooly mess that can't be answered. Problems like the Substitution Problem, accounting for abiotic nature, or well-known issues with commensurability and the Baseline Problem show the difficulty in metaphysically defending specific axiological truth. Nonetheless, let us assume for a moment that value is real and out there in the world. I believe that an

obligations-centered ethic is actually no less important to the conservation debate because nothing about realistic value would negate the additional ethical force that obligations provide. Until we can agree on value realism, obligations regarding nature provide a path forward.

The use of value language may inspire, but also divides. Value as a theoretical foundation for protecting nature has an intuitive appeal, but does not survive long-term scrutiny. One major policy upshot of reorienting the ethic behind conservation discourse is that compromise is not a dirty word.

Cooperation becomes necessary, and compromise comes out of cooperation. We are not sacrificing value; instead, we are forced to look for win-wins that respect the unique perspective, complex role, and interconnection of multiple perspectives.

The emphasis obligation-centered ethics pace on cooperation suggests that legal networks providing protection for nature ought be discussed at the forefront of conservation efforts. So for example, rather than fighting the development of the Su dam, perhaps environmentalists should seek active protection for the Susitna watershed. A debate over adopting the Susitna as a National Park, Wilderness Area, State Park, National Scenic River, National Monument, or other protective measure would look quite different than the debate over whether salmon are worth more than a dam.

Looking Forward

Before going further, I should give a quick disclaimer about the methods I have used. Applied ethics is not a science. I mean this practically, colloquially,

and academically. I have not passed cases through any rigorous framework and I have not validated any philosophical conclusions. As I discussed in my introduction, while I hope the cases I have chosen to use help shed light on ethics, obligations, and values, I do understand that none of the cases presented fit quite like a glove. I have carefully chosen cases and aspects of those cases that I feel provoke a certain perspective and demonstrate real world ethics at play. The great challenge of applied ethics is to demonstrate underlying philosophical aspects of the real world interactions; the great challenge of environmental studies is to reach for the necessary tools required or any given case of environmental problem solving. With this in mind, I hope that all the cases and the philosophical analyses presented have demonstrated my thesis, but I fully admit that these cases alone do not prove anything; such certainty or truth is beyond the possible scope of applied ethics.

New tools for understanding our relationship with, place in, and impact on the natural have never been more important. From biodiversity loss to climate change, the human-nature relationship is being rewritten. The anthropoene has forced a reassessment of many values, priorities, and processes with regard to how we use and protect nature. We are redefining notions like wildness and naturalness; we are facing tough choices and tipping points in many efforts to save biodiversity and unique environments. The challenges before us are also great opportunities for creativity and cooperation. Just as ideas like Intervention Ecology may change standards for biodiversity within conservation biology to better tackle novel problems, a new wave of environmental philosophy shaped by dynamic thought will better provide the conservation world with a tool to understand and work through problems within the normative dimensions of

conservation. This new wave of environmental philosophy has already taken hold in many areas, particularly within the arena of environmental virtue ethics and environmental pragmatism. In the spirit of these ideas, I hope to have highlighted the potential gains within the neo-Kantian arena by providing an argument for obligations-centered ethics within conservation specifically. Beyond this, I know how essential ethics and values are to a comprehensive understanding of environmental problems. Along with science, and policy approaches, ethics provides a necessary pillar of support to the cohesion of environmental studies.

Ethics needs to meet ecology and policies where they are. It is naive and counterproductive to rehash debates about intrinsic value or try and parse out Leopold's maxim. These conversations—important to the fabric of environmental ethics—are not over but are bricks upon which we can continue to build understanding. I do not mean to be berating environmental ethicists; in fact, I think most would agree with me. But within such a small field, the contemporary work aimed at forwarding new conversations is often overshadowed by historic discourse that does little to help ground the ethical aspects of environmental problems and problem solving. As Andrew Light has said, "[environmental philosophers] need to take up the largely empirical question of what morally motivates humans to change their attitudes, behaviors, and policy preferences towards those more supportive of long-term environmental sustainability" (Light, 2002, p.446). Though agreement on environmental value may be a tall order, agreement on environmental goals is not.⁴⁰ An obligations orientation to

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⁴⁰ This is an idea that Bryan Norton has been championing since the 1980s.

protecting nature helps pragmatically highlight ethical ends such that they may be cooperatively pursued. I hope to have provided a reason for the contemporary discourse—looking to build rather than rehash—to further consider an obligations-centered conservation ethics.

I began to look at the ethics of conservation with an interest in Social Contract Theory, particularly Contractualism, as an approach to environmental ethics. I see this dissertation as a foundation from which I can better pursue that original aim. Contractualism could further provide a grounding theory for an obligations-based conservation ethic.

As discussed earlier, contractualism holds that, "an act is wrong if its performance under the circumstances would be disallowed by any set of principles for the general regulation of behavior that no one could reasonably reject as a basis for informed, unforced, general agreement" (Scanlon 1998, p. 153). Moral standards in Scanlon's view draw authority from justification.

Unjustifiability is a necessary and sufficient condition for an act to be wrong. If an act cannot be justified to others, then Wrongness is the property that results. With this definition, Scanlon emphasizes a negative account of right and a positive account of wrong. That is to say, wrongness is what contractualism assesses on the basis of reason, and rightness is simply that which is not wrong. This is especially useful in an environmental context because so much of the environmental world does not fit easily within ordinary social interaction. Furthermore, predicating morality on wrongness forces concern over others being wronged, marking out a space of consideration that goes beyond the net value or consequence of an action (Scanlon, 1998).

Beyond this, Scanlon offers a path to judging the justificatory muster of different reasons backing moral principles on which contractualism can then claim an act is wrong. Contractualism must take into account how an action impacts others, but does not hold there is only one rational view towards value. In this way it can better incorporate multiple perspectives and conflicting ethical concerns. Issues of wellbeing, respect, and burden all offer ample fodder for rejecting principles of action on a contractualist view. I would like to continue to explore obligations that arise from intersubjectively validated principles of moral behavior and the reasons that could reject such principles on contractualist grounds.

I have raised more questions then I have answered with this dissertation, with the aim of motivating a continued conversation about obligations and environmental ethics. I have taken obligations-centered conservation ethics—an under-considered theoretical position—and shown its force as an alternative view with substantial benefit and potential richness.

Ultimately there are many reasons to protect nature, and relying narrowly on any one subset only restricts the tools available for defending the natural world. Aldo Leopold found it inconceivable that, "an ethical relationship to land can exists without love, respect, and admiration for land, and a high regard for its value...value in the philosophical sense" (Leopold, 1949, p.223). However, to love respect and admire the land, or more specifically a canyon, whale, ant colony, forest, or flower, is not to constrain its value in concrete universal terms. Our individual experience, our collective experience, an ecological understanding, and an awareness of the interconnections found in nature, form a

nuanced and messy complex natural value that can be used as a set of nuanced and complex reasons for our consideration.

Unless the full gamut of reasons for conservation can be integrated into the same conversation, our approach will be deficient. Do we save the Bluefin and damn the fisherman? Or worse, do we save the mountain but without the pika? Or, if we value the Grand Canyon because of the amazing intricacies and rarity of its dessert ecosystem, do we fail to incorporate the aesthetic experience of such a beautiful place? Or, if we value the owl because its trophic importance, or its life, or intelligence, or history, might we not be able to save it, unless we see the validity of such multiple value perspectives as well as understand the needs of the local community, animal populations, relevant persons, and so on?

Environmental ethics could be further integrated into the conservation debate and could do much more to forward solutions to conservation conflicts. Intrinsic value could certainly provide a strong reason for protection, and indeed many have argued it provides the only reason for protection. But restricting such discourse too narrowly on value sidelines a needed understanding of how the environmental value factors into responsibilities, concerns, cultural dimensions, and politics. I see a great potential here for environmental studies and a necessary consideration for environmental ethics.

Conclusions

During the spring thaw of 2003, Cannon Cliff's famed 'Old Man of the Mountain' died. The 'Old Man' was a granite formation in the undeniable shape of an old man's profile high on Cannon in the White Mountains of New

Hampshire. The Old Man was a landmark, hallmark, and icon; his effigy inspired the works of Nathaniel Hawthorne and Daniel Webster, and now graces the New Hampshire state quarter. Before The Great Stone Face's fateful demise at the hand of natural erosion, local authorities tried in vain to save him. His life support came in the form of wires, metal mesh-netting, cement, and rebar put in place to hold his brittle bones together. Perhaps these efforts extended his life, but in the end the Old Man crumbled. The loss of this icon was widely considered an inevitable tragedy. No one pushed him over. No one sped up his demise, but none-the-less, the loss was felt.

So now consider again the case of *Phil*, only this time Phil is not the last man on earth:

Phil and the Old Man

One million people care about a rock. They recognize the odd similarity between this rock and an old man. It makes them reflect upon the their environment, it peaks their curiosity, it symbolizes their sense of place. Phil takes a stick of dynamite and blows the Old Man to kingdom come.

Such a rock surely seems to have great worth. Could Phil pay for the right to blow up the Old Man? Could Phil replace it with a newer, better Young Man? Likely not. But even after his lithocide the mountain is still there, the cliff is still there, the squirrels and deer and spiders are still there. The rock itself has not been destroyed. Is the loss then only aesthetic or cultural? If not, what intrinsic

value has been lost? I am only suggesting that it is very hard to put one's finger on objective worth.

Phil as the last man may not have been morally permitted to destroy the oasis because of its moral value, but likely grounds for understanding such value in the oasis—life, some level of biodiversity, provision of needs, ecology, etc.—may be hard to see in the Old Man—worthwhile for historical, cultural, anthropological, and personal reasons. Nonetheless, Phil owes it to the community not to destroy the Old Man (a contractualist obligation), and Phil owes it to the Old Man because of reasons accepted by the community (a Korsgaardian obligation). The first type of obligation may disappear with the absence of other people, but the second may not. Phil may find his community of other persons gone from the world, but he would never find his own rationality free from the community of reason. No matter the situation, Phil needs a reason to destroy the Old Man.

In Richard Sylvan's famous use of the 'Last Man' argument he suggests that the case of the last man can be extended to the 'Last People' (Sylvan, 1973). The idea being that if the Last man ought not to destroy the oasis then too the last people ought not to destroy the oasis; i.e. there should not be a morally significant difference between a world with one person and a world with many if nature really matters. By broadening the example from the last man to the last people, Sylvan seeks to create an objective account of why nature ought to be protected—intrinsic value. The point here is that such an extension only works in one direction. It may seem that if the last man should protect nature (presumably for its intrinsic value), then so too ought the last people, but if the last people

ought to protect nature we are left with no clear reasoning that necessitates the last man do the same.

The question of what Phil owes other real persons with respect to the Old Man expresses a morally significant difference between a last person on earth scenario and any last collective of persons scenario. The path to justifying Phil's action changes, however, no matter the context Phil always has a moral requirement to be able to appeal to reason in support of his actions. Sylvan considers the last people to have "the very best of reasons," but assumes such reasons can conform to non-environmental ethics and still be environmentally disastrous (Sylvan, 1973. p.20). His very objection on reasonable grounds demonstrates that such a conflict is theoretically moot.

Inherent in a system of ethics built upon responsibilities and obligations is also an ethic of restriction. This is yet another way to consider the nature of conservation: not as the obligation to protect, but as a restriction against destruction. Obligations, responsibilities, and restrictions regarding the natural world are grounded in our agency. Thinking back to the case of *Phil* and the end of the world that began this dissertation one more time, we see that if Phil cannot appeal to widely acceptable reasons—be it value, ownership, communal agreement, necessity, or otherwise—then, regardless of Phil's personal whim, he ought not destroy the oasis because he simply has no reason to do so. Even with preference or other basic reasons, without a *compelling* reason for his action Phil would have no grounds to *justify* the destruction of the Oasis or the Old Man to others (even if such justification were hypothetical).

While a myriad of conservation efforts are dynamically and creatively aimed to protect the natural world, and while conservation biology and ecology

has adapted, grown, and evolved with the time, the normative foundations of environmental conservation require philosophical maintenance. Conservation Biology (as a discipline) has pushed new ways of exploring the science of biodiversity, biotic interactions, and species protection. Conservation Ethics needs to symmetrically grow, connecting what we understand about the natural world with what we ought to do in protecting the natural world. Narrow and metaphysically realist value-centered ethics have implicitly guided the environmental ethics of conservation. The focus within environmental ethics on what has value, where that value resides, and how that value can be compared has prevented the bedrock of conservation from both adapting in the face of novel challenges and from moving past age old debates, like intrinsic value. An obligations-centered conservation ethics provides a plausible alternative, intuitively describing conservation, more comprehensively inclusive of the natural world, and avoiding many of the practical problems inherent to a value-centered approach.

Obligation-centered ethics reconcile the protection of the oasis with the protection of the old man, which is another way of saying that it allows us to incorporate personal and social reasoning into our conservation ethic. This is vital: if the normativity of conservation continues to rest with a narrowly defined environmental value, then nature remains separate from society. Value-centered ethics naturalize value by finding it in properties of the natural world. This makes conservation something fundamentally *of* those properties. Value takes problems of protecting nature and isolates them *in* nature.

I am well aware that a social critique here may sound like it is coming out of left field, but if nature is separate from society then the exploitation of the natural world is a separate problem from any social roots of that exploitation. Social philosopher Herbert Marcuse famously warned that inherent in a social separation from nature is, "the domination of man through the domination of nature" (Marcuse, 1972, p.61). In seeking to protect the natural world, the value-centered conservation orientation has actually strengthened the human-nature dichotomy. Metaphysically real value assertions erode the work of so many in the environmental world seeking to dismantle the idea that humans are separate from nature.

An obligations-centered ethic is necessarily anthropogenic—stemming from intersubjectively validated reasons—but that does not make such an approach necessarily anthropocentric. As Marcuse reminds us, "The pollution of air and water, the noise, the encroachment of industry and commerce on open natural space have the physical weight of enslavement" (Marcuse, 1972, p.61). Our social contract and deontological agency demands that we take on certain responsibilities for nature; greater clarity on these obligations breaks the impasse in conservation ethics circumscribed by one-dimensional axiology. The inclusion of more understandings of value and reasons brings together the complex social ecology, natural ecology, individual and collective perspectives. Inherent in Marcuse's critique of domination is a symmetric call to action further defended by an obligation-centered conservation ethic: the protection of man through the protection of nature.

THE END

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"Let all the philosophers come and raise their quibbling objections: they will be wasting their time and effort" - Jean-Jacques Rousseau