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Résumé de l'article

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VALUE MONISM, RICHNESS, AND ENVIRONMENTAL ETHICS

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ABSTRACT:

The intuitions at the core of environmental ethics and of other neglected value realms put pressure on traditional anthropocentric ethics based on monistic value theories. Such pressure is so severe that it has led many to give up on the idea of monistic value theories altogether. I argue that value monism is still preferable to value pluralism and that, indeed, these new challenges are opportunities to vastly improve impoverished traditional theories. I suggest an alternative monistic theory, Richness Theory, and show how it provides an opportunity to capture the needs of both environmental ethics and of our traditional ethics.

RÉSUMÉ :

Les intuitions au cœur de l'éthique de l'environnement et celles d'autres domaines négligés de valeurs exercent une pression sur l'éthique anthropocentrique traditionnelle basée sur les théories monistes de la valeur. La force importante de cette pression fait que plusieurs ont abandonné ces théories. Nous soutenons que le monisme des valeurs demeure préférable au pluralisme des valeurs et que, en fait, ces nouveaux défis offrent la possibilité de grandement enrichir les théories traditionnelles appauvries. Nous proposons une différente théorie moniste, la théorie de la richesse, et montrons en quoi elle permet de capter les besoins à la fois de l'éthique de l'environnement et de l'éthique traditionnelle.

INTRODUCTION

Environmental ethics is a relatively new field of study, but it is built on ancient intuitions about the value of natural objects, the value of life, the value of natural beauty, and the value of the remarkable interdependence of nature. During the industrialization of the Western world, these old intuitions have clearly been neglected both in the culture at large as well as in the predominant academic ethics. In particular, there is little place for those intuitions in the traditional person-entered ethics that have dominated Western philosophy over the past several centuries. These ethics have sought to maximize human well-being in the form of pleasure or happiness or preference satisfaction. Alternatively, they have sought to protect the rights of human beings: the right to life, property, well-being, and so on. The development of these theories has run parallel to a general growth in the well-being of the Western citizen. These theories certainly arose, at least in part, as a response to the socio-political challenges of the past few centuries. Many of these challenges have lessened in the Western world, and new challenges have arisen—chief among them is a rapidly worsening environmental crisis. Unfortunately, the ethics that arose to improve human lives are ill-suited to capture the intuitions mentioned above. Ecosystems have no feelings. The oceans do not (obviously) have rights. Although some animals probably do suffer and feel versions of pleasure and happiness, can we naturally extend some notion of rights to them? And once we do, how do we still account for the strong intuition that a human life counts for more than that of a mouse, for instance? The general response is that natural objects are only instrumentally valuable, but this is deeply unsatisfying to many of us. Surely, there is something good in itself in a rain forest: its beauty, its richness, the depth of its species, etc. The rainforest's existence makes for a better world, all other things being equal, and this is so independently of whether or not the forest does any good to humans to at all. By contrast, the dominant ethical theories are generally very stingy with their ascription of intrinsic value. Indeed, for reasons of parsimony, the underlying value theories are usually monistic. Things like knowledge, beauty, autonomy, and love also seem like things that are valuable in themselves, but this value is hard to capture using theories that focus exclusively on human well-being.

I propose that most modern-day theories fail to take seriously the multiple presentations of value in our world. I will argue, nonetheless, that the draw of monism is justified for well-established reasons of theoretical simplicity. Yet the benefits of simplicity do not obviate the need to explain the evidence. I present a quick formulation of a monistic theory that does take the value evidence seriously. I do not give a full defense of this theory, but I do hope to show its plausibility for the present investigation. Finally, I show that this theory can naturally account for the traditionally difficult value areas at the center of environmental ethics.

MONISM VS. PLURALISM

Value pluralism is the thesis that there are many basic (i.e., non-reducible), intrinsically valuable properties in the world. Value monism is the thesis that there is only one intrinsically valuable property. Pluralist theories of value have strong advantages over existing monistic theories because they more easily capture the value evidence. On the face of it, we value many things: we love people and paintings; we like foods and generosity; we care about flowers and physics; we value autonomy and pleasure. We treat many of these things as ends in themselves. If all of these things are intrinsically valuable, then the monist must show that they all share some single property that accounts for their degree of value. This is a serious obligation—one that, most would admit, has yet to be met by any monistic theory. And so there are great evidentiary reasons to be a pluralist about value.

There are two types of pluralist to consider; call them the radical pluralist and the moderate pluralist. The radical pluralist claims that there are many (at least two, though usually many more) different values and that these values are incommensurable. (Two measures are incommensurable if it doesn't make sense to compare them, for example, my body temperature and my IQ.) The moderate pluralist claims that all values are commensurable, but not reducible.

Radical Pluralism

There are a number of well-regarded arguments undermining radical pluralism. Indeed, I have argued elsewhere that radical pluralism is impossible[1].

I will give a brief overview of that argument here.

A widely-accepted basic feature of value is that it should give rise to motivations[2]. As Mackie put it: "An objective good would be sought by anyone acquainted with it, not because of any contingent fact that this person, or every person, is so constituted that he desires this end, but just because the end has to-be-pursuedness built into it[3]."

A proper appreciation of value, then, must motivate us. Furthermore, the strength of these motivations should be commensurable with the motivating value. A more valuable thing should (normatively) motivate us more than a less valuable thing. Graham Oddie couples these two assumptions in what he calls the Merit Connection[4]:

(MC) State of affairs S merits a desire with a strength proportional to the value of state of affairs S.

These two widely-held assumptions lead to the conclusion that all values are mutually commensurable. If the strengths of motivations are commensurable (and no one has suggested the contrary), and if all values are commensurable to some desire strength, then all values are commensurable to each other.

This result should be quite welcome. It is a well-known feature of radical pluralism that it makes rational decision theory impossible. For this reason alone, many philosophers have found value incommensurability undesirable. Of course, this is an extremely brief dismissal of a commonly defended position. I touch on it here merely to orient the reader with respect to the structure of the larger argument within which this paper is situated.

Moderate Pluralism

The moderate pluralist asserts that there is an objective, non-reducible, commensurable plurality of values. This is an extremely plausible starting point, as there does seem to be a plurality of not obviously reducible things that we value. Indeed, it is this piece of value evidence that demands explanation from the environmental ethicist's point of view. It is also very close to our folk theory of value: we all pursue multiple values.

Because these plural values are commensurable, there must exist a set of proportionality measures between them that preserve the transitivity of value. Suppose *x*, *y*, and *z* are the fundamental values. To make this a complete value theory, we need to supplement it with something like the following: (a) $x=2y$, (b) $y=2z$, and (c) $x=4z$. So our theory of value is that *x*, *y*, and *z* are valuable and (a), (b), and (c) hold between them.

What explains this complicated set of value facts? What, for example, is the explanation for (a) $x=2y$? It is not an analytic truth. Even supposing goodness be defined in terms of some natural property x, the value of x will not be part of the analysis of x. Consider: Good =def, *x* =def (analysis of *x*). If *x* is supposed to serve as a naturalistic reductive definition of *x*, then no value terms can occur in (analysis of *x*); that is, it cannot be part of the definition of *x* that *x* is twice as valuable as *y.* But this should be unsurprising: does anyone find it plausible that value proportions should be part of the final analyses of life, love, happiness, pleasure, freedom, knowledge, rightness, or any of the other prospective values?

But the only other plausible explanation for (a) is not available to the pluralist, namely that x has twice as much of some good property P as *y*. This option is monistic: it reduces the value of *x*, *y*, and *z* to the value of P. In the end, the pluralist has stipulated away the only possible explanation for (a). And so the pluralist is forced to accept a number of, in principle, inexplicable synthetic truths—not just the basic facts that *x, y,* and *z* are intrinsic non-reducible goods, but also the facts that the measures between them are what they are. Clearly, this becomes more and more unpalatable the greater the number of values we postulate; so a theory like Michael Stocker's, which posits nearly as many types of value as there are experiencers, becomes, on the face of it, little more than a description[5]. Most of the facts in such a 'theory' of the good remain unexplained.

Let's briefly consider an analogous theoretical situation from the field of physics. In nineteenth-century physics, the concept of force was front and center (indeed, it may still be). A force is a "vector quantity"; it has both direction and magnitude. At that time, scientists were exploring the 'ecology' of forces by measuring them against each other using balances, pulleys, and the like. Newton had given us the gravitation force (and his three laws of motion). We had the electrostatic force. We had magnetism. But there also seemed to be chemical forces, and frictional forces, tension, and others. Indeed, before Newton, there were innumerable force classes: forces from 'my hand' and from 'your hand', from 'rivers smashing against dams', from 'tides', from 'fire', and so on. In the twentieth century, two other fundamental forces were discovered in the quantum world: the weak force and the strong force.

This situation is analogous to the situation in which we find ourselves with respect to value. Scientists realized that all of these 'types' of forces could be balanced against each other, measured—they were 'commensurable.' They had a common unit of measure (called a 'Newton'). On the other hand, the sources of 'force' seemed innumerable and, in many cases, not at all similar. Force appeared, then, to be plural and commensurable. Of course, that *could have* been how the world was ordered; there may have been no further underlying order or unification. But the same considerations that I have outlined above drove scientists to seek an explanation for this ecology of forces. And the fact that these forces could all be measured and balanced against each other was a strong encouragement to seek out a monistic theory of force. That project has been wildly productive (if not yet fully successful). By the end of the nineteenth century, electricity, magnetism and (the vast varieties of) light were all unified in the electromagnetic force. By the middle of the twentieth century, all forces had been reduced to four: gravity, and the electromagnetic, weak, and strong forces. At present, there are only two forces resisting unification: gravity and the forces unified by Grand Unified Theories (electroweak and strong). Moreover, much of the progress in physics during the past 150 years, both theoretically and practically, has flowed from the drive to unify this apparent plurality.

In any theory of the world, there will, undoubtedly, remain something at least partially unexplained. And if no 'ought' can be derived from an 'is,' any value theory will have one or more partially unexplained basic facts. But the unexplained thoughts entailed by moderate pluralism do not have the feel of basic facts; they seem top beg for explanation. What makes the good attach to x exactly twice as much as to y? In general, if two things are commensurable, the explanation for this fact is that they share some property. The reason why the temperature of my hand and the temperature of a Miami day can be compared is that they both share a property: heat, or kinetic energy. The reason why I can compare my weight with that of Jupiter is that they both share a property: mass. Presumably, the reason why we can compare my intelligence with yours is that we both share some property: intelligence. If the values x, y, and z are all commensurable, then we immediately have a good reason to assume that there is some property P shared by x, y, and z that makes each of them valuable to a

certain degree. P is an explanation for the commensurability of *x, y*, and *z*. But the pluralist is committed to claiming that there is no explanation for their commensurability.

On the face of it, this is a strange claim to make. What reasons in general can philosophers have for giving up on the search for explanations besides claiming to have arrived at a good one? A monist has a principled reason to stop seeking an explanation. If property P is the only good, it must be that P's being the good is, at least partially, basic and unexplained; either because P is good by definition, or by synthetic necessity. The pluralist, by contrast, is under the obligation to provide some similar justification for giving up his exploration of value. The only one forthcoming is that she has tried hard to find a unified value theory and has failed.

But the plausibility of this explanation clearly depends on how hard she has tried. I, of course, think we haven't tried hard enough: the number of monistic theories of the good that have been vigorously explored can probably be counted on one hand, and have focused, for the most part, on properties closely tied to human psychology, such as pleasure, desire-satisfaction, and reason. Shouldn't we look a bit further afield? After all, if value is part of the structure of the objective universe, why need it be captured by some obvious, easy to grasp, human-oriented concept? The basic concepts of physics certainly aren't so easily grasped, and we have yet to find a unified theory of our physical universe. But are we justified in giving up?

Pluralism is what I would call a philosophically unstable theory; it will always leave us with the suspicion that there is something deeper to be discovered. If ever we did arrive at a good pluralist theory, we would (and should) still be severely tempted to continue looking for the unity underneath those plural values. And so without some argument to show that monism is impossible, we have good reason to continue the search. Moreover, if we find a monistic theory that can capture as much evidence as a pluralistic one, the monistic theory is the better one.

There is a second reason why an environmental ethicist should be wary of the pull of pluralism: assuming a pluralist stance makes persuasion particularly difficult. The practical urgency behind environmental ethics is that things of fundamental value are being neglected and destroyed by cultures bound to traditional anthropocentric ethics. Convincing people that there are plural intrinsic values will do nothing to convince them that ecosystems are intrinsically valuable unless they already have that intuition. There is no further argument one can make to convince them of the value of ecosystems, non-human animals, or natural objects. Pluralists often have the feeling that they are creating more space for respecting value. But the reverse is more likely to be true. If I do not see the value of ecosystems in the first place, there is nothing to which a pluralist can appeal in order to convince me of their value. This is one reason why so many environmental ethicists return to the monistic anthropocentric the-

ories when making persuasive arguments: only in this way can they appeal to common values to convince others of the value of important natural objects.

Ultimately, if we can formulate a monistic theory that captures the values of environmental ethics *as well as* the more obvious human-centered values, we will be in a much better position to convince those who doubt the value of ecosystems, animals, etc. This consideration, by the way, is not merely practical. If we are defending values that cannot be shared with, or shown to, large numbers of other valuers, we have a good reason to doubt that we are defending objective values. Indeed, the ability to persuade an open-minded interlocutor through appeals to reason and evidence is a type of functional evidence that we are on strong theoretical grounds. This surrender of certain forms of pluralist on the battlefields of persuasion is often the first and last step back to the subjectivity or relativity of value because it suggests there is no independent fact of the matter to function as the ground for persuasion.

Accordingly, the claim is that, the ideal value theory has the following structure: *there exists a property P whose distribution in the world determines the value structure of the world*. This is either because the property P is identical with the property of being good, or because the property P is the only thing that has the property of being good.

All things being equal, a monistic theory that can do a reasonably good job of capturing the plurality of value evidence will be preferable to any pluralistic theory. As it stands now, however, pluralistic theories are more viable because they are more accurate. We manifestly value love, life, art, memory, and many other things; and while pluralism can easily capture this diversity, monism has had great difficulty doing so. Because of this difficulty, traditional monistic theories have resorted to *explaining away* the evidence rather than explaining it.

Indeed, pluralism enjoys an advantage over monism to the extent that it takes our evidence seriously and attempts to explain it, whereas monistic theories, such as early utilitarianism, almost invariably attempt to explain away much of our value evidence. Suppose we are eudemonistic utilitarians. Our general method of explaining away is to claim that any intuition we might have that some V other than happiness is valuable is in fact due to V's being normally instrumental to creating happiness, i.e., that there is some strong, but contingent connection between V and happiness. Our intuitions that life, integrity, honesty, not-killing, beauty, knowledge etc. are valuable are all explained away in this manner. They only appear to be valuable because they are often useful for creating happiness. Not surprisingly, many of the strong objections to utilitarianism charge that it fails to take seriously our intuitions that things other than happiness are valuable.

So what do we do? We want to be monists, but we must capture the evidence of value pluralism. We are in the same situation as any good scientist. By inference to the best explanation, we must search for a unifying explanation of all the things we value. If love, beauty, freedom, knowledge, ecosystems, people, and happiness all appear to be intrinsically valuable, then they must all share some value-giving property.

VALUE AS RICHNESS

What could this possibly be? In a book-length study, I defended the thesis that a property I call 'richness' is an excellent candidate to be the property that unifies the apparent plurality of value[6]. While I do not have space to fully make that argument here, I want to show how assuming monism, coupled with freeing ourselves from the shackles of anthropocentric ethics, can move us quickly into new theoretical territory.

If we take seriously that all value comes from the same source, then we are freed up to take seriously value realms outside of traditional ethics. One plausible place to start would be aesthetics. Aesthetics is, as Nozick put it, "the area that speaks most frequently and articulately about value[7]." There are innumerable accounts of aesthetic value, of course. Fortunately, only a few purport to be monistic and objective. Moreover, few plausibly point at something that might be able to apply outside of aesthetics, that is, that might undergird a broader value theory.

As far back as Plato, philosophers and artists have argued that beauty is equivalent to 'organic unity,' as it has most commonly been called. The concept of organic unity originated when philosophers noted the similarity between good art and living creatures. Plato said of rhetoric that "all the parts should be in keeping with each other and with the whole like a living being, with a body of its own, so as not to be headless or footless, but so as to have middle and members, composed in keeping with each other and with the whole[8]".

The organic metaphor has been in use ever since. An artist tries to create things as natural and surprising as the multifarious living world. There are many features of living beings to which the organic metaphor might be pointing. First, consider the property of having tightly interdependent parts: "Men call beautiful the things in which the parts fully answer to each other [...][9]" said Dante. The functioning of most of the parts of a living body depends on the further functioning of most of the other parts. A human being needs its liver to survive; the liver needs the heart to function; the heart needs the lungs to function; and the lungs need the liver. This interdependence also characterizes the best art. In living beings, the parts must answer to each other. What the heart asks for, the liver gives; what the liver gives, the heart takes; what the liver asks for, the heart gives; what the heart gives, the liver takes. Likewise, in the best art no part is placed without respect for the effect it will have on the other parts or without an understanding of how it itself will change in the context of the other parts.

This should catch our interest. Already, we see two disparate value realms being connected, aesthetics and living creatures. Indeed, this particular connection is especially interesting from the standpoint of environmental ethics: interdependence is not only a feature of living organisms, but also of ecosystems—one of the more difficult value entities to defend with individualistic ethics.

A number of attempts have been made to capture this notion of interdependence philosophically. Aristotle said of tragedy that it is a whole, "the structural union of the parts being such that, if any one of them is displaced or removed, the whole will be disjointed and disturbed. For a thing whose presence or absence makes no visible difference, is not an organic part of the whole[10]." As John Hospers put it: "In the unified object, everything that is necessary is there, and nothing that is not necessary is there […] in a work of art, if a certain yellow patch were not in a painting, its entire character would be altered, and so would a play if a particular scene were not in it, in just the place where it is[11]."

Dewitt Parker claims that 'the ancient law of organic unity' is "the fact that each element in a work of art is necessary to its value, that it contains no elements that are not thus necessary, and that all that are needful are there[12]." And as Harold Osborne put it, "[t]he theory of organic unity claims that any subtraction or addition would diminish the value of the work (of art) as a whole, changing also the character of all the parts [...][13]".

This 'ancient law' is a common method of evaluating works of art. Few, if any, artistic works meet this ideal of unity, of course. Even the greatest works have filler words and passages that presumably could have been replaced with other words and passages without causing harm to the work. What Dante, Aristotle and the others are pointing to is the ideal artistic work. All art, they are saying, strives to be an organic unity.

So interdependence is one attempt to capture the notion of organic unity. The other common attempt claims that an organic unity is a unified variety.

Francis Hutcheson defined beauty as a "compound ratio of uniformity and variety: so that where the uniformity of bodies is equal, the beauty is as the variety; and where the variety is equal, the beauty is as the uniformity."

Harold Osborne in his *Theory of Beauty* says, "All works of art, even the simplest, are fairly complex for immediate perception and it has been a commonplace of artistic criticism that a good work of art must have a high degree of unity… […] The two notions, however vague, suggest that works of art of whatever kind may have in common the formal property of being *complex unities*."

In the *Ars Poetica,* Horace says that a poem should be a unity of different parts. Coleridge repeatedly cited "unity in multiplicity" as his formula for aesthetic success. John Hospers has stated that the organically unified object "should contain within itself a large number of diverse elements, each of which in some way contributes to the total integration of the unified whole, so there is no confusion despite the disparate elements." Santayana identified "unity in multiplicity" as the key measure of the value in aesthetic form.

Robert Nozick also argued that most value is reducible to the value of organic unity. Obviously, we need a value property that can come in degrees, he said: "Holding fixed the unifiedness of the material, the degree of organic unity varies

directly with the degree of diversity of that material being unified. Holding fixed the degree of diversity of the material, the degree of organic unity varies directly with the degree of unifiedness […][14]".

So let's see if we can put these two concepts of organic unity together. I call the resulting property 'richness.' According to Nozick and the unity-and-variety camp, richness is a measure of the unity and variety in a thing. We could capture it thus:

$$R = UV$$

This formula captures important boundary conditions. A state of affairs with no variety, with nothing going on inside, will be minimally rich. Consider a musical piece consisting of a single note or a painting that is nothing but a blank canvas. If we ignore any meta-richness (for instance, the richness hidden in the commentary about music that something like '4:33' by John Cage exhibits), these are minimally rich objects because they have minimal variety. Moreover, these are not impressive works of art. Likewise, a completely unordered, chaotic state of affairs will have minimal richness. An artwork with no structure or cohesion, a work that is purely random, will have minimal richness. In aesthetics (and elsewhere), we are looking for an ordered variety, something complicated brought together harmoniously.

But what do we mean by unity and variety?

In analyzing unity, it pays, I suggest, to consider closely related, if not synonymous, terms, such as order, simplicity, uniformity, harmony, and coherence. What do these concepts have in common? All of them imply a *limitation* on the number of properties in a state of affairs. This is straightforwardly true of simplicity and uniformity. But the same is true for unity and order. A whole becomes unified in virtue of its parts' sharing certain properties. One way of putting this is that the number of *determinates* exhibited for a particular *determinable* is minimized. A determinate is a specific way of being a determinable; e.g., scarlet and carmine are both determinates of the determinable red in that they are ways of being red. A collection of Americans is a somewhat ordered state because, regardless of all the differences among the individuals in the collection, they all share a property, namely, that of being citizens of the United States. The determinable of *citizenship* is fixed, limited to one determinate, and this is what the order of that collection consists in. The more determinables we fix or limit in our collection, the more ordered it becomes. A determinable need not be limited to only one determinate for some state to be unified. A house that is red and blue is unified by that colour scheme: the determinable colour is limited to only two of its many determinates. A maximally unified state is one in which all the parts of the collection share all their properties. Presumably, this state consists of something like one indivisible concrete particular (or a collection of concrete particulars indiscernible from each other). A minimally unified state consists, presumably, in a large collection of objects that share as few properties as possible. Let us suppose, then, that the unity axis of richness is a measure of the *limitations* on the number of determinates instantiated for some

determinable.

An increase in variety, on the other hand, is a *reduction of limitations* on determinables. The more varied a state is, intuitively, *the greater the number* of determinates exhibited for each determinable. The most varied state with respect to the determinable 'hair colour' is one that presents all possible determinates, i.e., all possible hair colours. A collection of Americans that exhibited all colours of hair would be more varied than one that presented only two colours of hair. And a collection of persons that exhibited all possible citizenships and all possible hair colours would be a more varied state than one that exhibited only Americans of many different hair colours. If this is right, variety and unity vary inversely. Variety is lack of unity, and unity is lack of variety[15].

This causes serious problems, however. UV, so construed, won't be a good measure of anything, because UV will always equal 1 (or some other constant). Variety will never increase without a corresponding decrease in unity and vice versa. Perhaps, then, (in defense of Hutcheson's and Nozick's take) variety and unity within richness should be maximized over different determinables. For instance, a collection of Americans all with the same hair colour is unified under two determinables and varied to some extent under all others. On this account, if variety were increased in those other determinables, we would increase the richness. This move could preserve a form of the original definition. For some whole **W** that exhibits two sets of determinables **U** and **V**, richness is that property that increases in whole **W** when the unity with respect to determinables **U** increases while the variety with respect to determinables **V** remains constant, *or* that property that increases in whole **W** when the variety with respect to some determinables **V** increases while the unity with respect to some determinables **U** remains constant. So:

$$Rw = UuVv$$

Good. The question at this point, though, is which determinables to put in set **U** and which in set **V**.

There are a number of ways to go from here, but I would like to continue with our general approach. If monism were true, then a good monistic theory would have to explain all objective value. Say, for the sake of argument, then, that our brief overview of the organic unity position in aesthetics hasn't sharpened our concept of richness sufficiently. We could turn elsewhere in the value realm and gather more evidence. By way of seeing how this approach would work, let us investigate another set of widely held values neglected by traditional anthropocentric ethics.

Theoreticians share a set of strong and consistent value intuitions. Indeed, we have already appealed to those intuitions in this paper. We strongly prefer simple theories to less simple theories. And we strongly prefer simple theories that capture lots of evidence to simple theories that capture less evidence. This is not

just an intuition of epistemic accuracy, since it is notoriously difficult to cash out this intuition as an epistemic justification. We just find 'elegant,' 'powerful' theories more beautiful and more desirable. I suspect that even if it were shown that parsimonious theories were no more likely to be true than less parsimonious theories, we theoreticians would still be strongly tempted to prefer the former. The value preference for simplicity is widespread and consistent. It has as much claim to being an objective value as most any. In addition, there is surprisingly little controversy over what it means in practice, even though the notion of simplicity is not easy to define (simply). We can generally agree on which of two theories is the more parsimonious.

Despite its ubiquity, this strong intuition of value has rarely been taken seriously *qua* value. If we are monists about value, though, we *must* take it seriously. We must attempt to explain this value and unify it with our other conceptions of value. It is obvious that most anthropocentric value theories have no chance to do this. How could the value of human well-being and theoretical parsimony ever be captured by the value of a single property?

One philosopher who did take the theoretical values seriously was Leibniz:

> One can say that he who acts perfectly is like an excellent geometer who knows how to find the best constructions for a problem; or like a good architect who utilizes his site and the funds destined for the building in the most advantageous manner, leaving nothing which offends or which falls short of the beauty of which it is susceptible; like a good paterfamilias who puts his capital to use in such a way that nothing is left waste or barren; like a skilful engineer who makes his effect by choosing the least difficult way; like a talented author who encloses a maximum of realities in the least possible volume. Now the most perfect of all beings and those which occupy the least possible volume, that is to say which hinder each other least, are spirits, and their perfections are the virtues […]
>
> God has chosen the [rule] which is the most perfect, that is to say the one which is at the same time the simplest in hypotheses and the richest in phenomena, as a geometrical line might be, of which the construction was easy and the properties and effects very admirable and of great extent[16].

Here, Leibniz raises to the highest level the value of simple rules giving rise to powerful consequences. This is a perfect universe because it is built out of the most theoretically powerful rules.

This gives us a possible route out of the problem of the inverse nature of unity and variety. Instead of just accounting for the overall variety and/or unity in a whole, we need to account for particular types of unity and particular types of variety. Elsewhere I have argued that we can turn Leibniz's intuition into a definition of the following form[17]:

Rw = UexplanationVexplanandum

The richness of **W** is the variety in the object multiplied by the unity of the best explanation for the variety of the object. This will not work, though, unless we only allow for certain types of explanations. This is because the best explanation for many, if not most, states of affairs would lie in the causal history leading to that state of affairs, whereas, that the actual causal history of **W** shouldn't be necessary for determining the richness of **W** (the Mona Lisa, for example, would be a rich object even if it popped into existence randomly). I suggest that because I am appealing to explanations to help *unify* explananda—because what is wanted is something that captures the *patterns* in the explananda—we need *nomic* explanations, i.e., explanations that look like laws.

Start with a simple example. The following famous series can be seen as unified by the fact that it suggests a *nomic* explanation:

(F) 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 …

There are many explanations for how these numbers might appear on the page before you. Explanations about how the printer copied them from the galleys, or how I learned them in discrete mathematics in junior high school, or some story about an Italian man named Fibonacci, or an account of the history of the Golden Ratio. But none of these explanations serve the present need; none of them are *nomic* in nature. Here, though, is a possible *explanatory law*: if y is in the (n–1) ordinal position of (F) and x is in the (n–2) ordinal position, then the number in the n^{th} position of (F) will equal x+y. This is a law-like explanation of all elements of the series other than the first two. Moreover, *it is precisely the reason why we see this series of numbers as unified*.

Now for a significantly more complicated example. James Joyce's novel *Portrait of the Artist as a Young Man* was, for its time, radically structured. The novel progresses in voice and tone throughout the body of the work, gradually passing from a child-like voice to the voice of an intelligent, rebellious young man. Many of the traditional unities of the novel are broken: tone, diction, even subject matter to a large extent. I want to suggest that the reader accepts this variety because she largely understands the reason for it, that is, she senses a law-like explanation for this variety. The reader grows up with the protagonist, and the language does as well. The law is therefore something like: if the protoganist is of age x, then he will write like someone of age x. What we ask for in an artwork (and in richness) is not just variety, but a non-arbitrary variety. We need a reason for the variety, an explanation for the way the artwork is. And what kind of explanation are we looking for? It is closely connected to the artist's intentions, of course, but, again, a good novel should not depend for its enjoyment on our knowing what the actual genesis of the words was. Rather, we want to know if the novel, by itself, is intelligible. I suggest that there is a method for explaining each of Joyce's choices, a method that does not require our know-

ing, say, that he happened to be drinking coffee while he wrote chapter four. We need only discern the 'laws' of the book, the rules governing the choices. These rules are grammatical, semantic, representational, dramatic, among others no doubt. They are for the most part not deterministic, and the *actual* rules that Joyce used are, of course, somewhat inaccessible to us. But, nonetheless, the unity we require of an artwork is just the sense that there *are* rules governing the choices—that there are structural reasons for why the novel is the way it is, for why the particular words are where they are. In the end, we want the sense that the work has some unitary explanation.

We look for law-like explanations of the variety in a rich object just as theoretical physicists look for law-like explanations of the variety of phenomena that makes up our world (which is also, we suspect, a rich object). To be unified, recall, is to follow *explanatory* rules. It may be that *Portrait* obeys the following rule: (R1) There shall be no less than ten instantiations of the letter 'e' on any one page. But this rule fails to be explanatory; it is *ad hoc*. Nothing about the fact of ten e's on each page makes us think that such a rule played any role in the genesis of the book. It is, therefore, not a properly unifying property of the book. On the other hand, if every word starts with a 'p,' then we are tempted to think that that was no accident, that it could only be explained by someone or something's following a rule entailing such a pattern.

This distinction between an explanatory rule and a non-explanatory rule gives us one method for understanding Aristotle's claim (and those of Leibniz and Coleridge) that in rich objects "the whole is prior to its parts"; that is, it allows us to capture the notion of organic unity as 'interdependence.' It is plausible to think that rich wholes are wholes in virtue of the rules governing them. Without those rules, the parts would *not* be parts of any whole because they would not be unified by anything. "Only when the whole has been dissolved will they [the parts] attain actuality," says Aristotle[18]. Explanations are prior, in some difficult-to-define sense, to what they explain. Non-explanatory rules, by contrast, are not prior to what they attempt to explain (hence the sense that they are *ad hoc*, that they are added on afterward). And so an explanatory unification is prior to the variety it explains.

This is a very brief attempt to get a little sharpness around the concept of richness. I have gone further with this analysis elsewhere, but this will suffice for the present essay. It should be noted that even the present account is a sharper definition than anyone in the aesthetics literature has attempted—sharper, also, than the definition Nozick used to defend a similar monistic thesis. Here I want to show that taking monism seriously gives us new avenues of investigation and that these avenues show real promise. By taking monism seriously, we are forced to be both more creative and more critical. A true monist about value should have had a very difficult time, excepting a Benthamite ethics, for example.

We've already seen that the theory that richness is the good is a promising aesthetic theory and almost an exact account of the values core to good theorizing. We've also seen hints that it might be able to capture the value of living things.

I have argued elsewhere that it is also a promising account for the value of autonomy, knowledge, experience, originality, love, virtue, happiness (of a certain kind), persons, preference satisfaction, and a number of other things[19]. The argument is that all of these things are rich, and that our natural intuitions of which of them are better than others correspond to our intuitions about which of them are richer than others.

For this paper, though, let us see how richness provides a promising account of environmental value.

ENVIRONMENTAL ETHICS

Let us look to three areas of trouble for the environmental ethicist. Anthropocentric theories have trouble capturing the appropriate value of non-human animals, the value of ecosystems, and the value of (untouched) wilderness.

Let's go through them one by one. I will, with the environmental ethicist, assume that these things have value. The obligation for the richness theorist will then be to show that each of these things is rich and that it is their very richness that gives them their value.

Non-human Animals

> The prodigious *diversity* of macroscopic structures of living beings rests in fact on a profound and no less remarkable *unity* of microscopic makeup[20]. [italics mine]

> Life is a paradoxical phenomenon. It is enormously *varied* – with creatures ranging from one thousandth of a millimeter to dozens of meters in length, having life-spans from hours to thousands of years, and with some species that spread over the whole globe, while others stay in their tiny ecological niche. And still, life is extremely *uniform*. All cells are built according to the same principles from the same molecular building blocks, no matter whether they are free-living microbes or a tiny part of a huge organism, and regardless of their position in the big family tree of life, […][21]. [italics mine]

Living organisms are the prototypical examples of richness. The variety of functioning structures in a full-grown animal is a true wonder. There are over two hundred different cell types in the human body. Each living cell has a variety of different structures within it. A 'typical' plant cell, for instance, contains, at least, the following sub-structures: Golgi apparatus, endoplasmic reticulum, vacuole, vesicle, ribosome, cell wall, chloroplast, cell membrane, nucleus, mitochondrion, cyclosol, middle lamella. And complex clumps of cells form bigger structures, such as tissues and organ systems. More fundamentally, there are twenty amino acids that regulate the functioning of each cell. These amino acids link together in uncountable combinations to compose the larger proteins that form the basic structures of the cell and, in turn, of the organism as a whole. The

way in which the amino acids link together determines how they function; the order of the amino acids and the shape of the final protein distinguish the proteins from each other. It is estimated that there are 5,000 different proteins expressed in each cell.

One could go on and on: the structure of DNA, the variety of life-states an organism undergoes over time, the behavioural responses to the multitude of stimuli an organism can receive.

And yet all of this is clearly unified to a great degree. The unity is made apparent by each organism's consistent structure over time, its set of regular behaviours, and the fact that each organism contains similar underlying biological 'instructions'—the DNA—that appear in and govern each and every living cell. We can identify a single organism through time just by following it; it occupies a unique shape in space-time. We can also identify a single individual by its peculiarities of behaviour. And each living organism has a unique set of DNA that governs its everyday functioning and overall development; the fact that all the events that make up living a history can be explained, at least partially, by a single set of instructions suggests remarkable unity.

The structures and behaviours of every living creature are largely what they are because they have been useful in the continuance of that organism's genes. The incredible variety of functions in each living creature all work together so that nearly all aspects of the creature can be understood as leading toward the end goal of healthy reproduction. This suggests that some rule like S: "P is in organism O if P contributes to reproduction and overall survival of O in environment E."

This is not as simple a rule as it looks, of course. S masks the hidden complexity in the rules that govern E, the laws of physics and chemistry. Nonetheless, given a set of rules governing a specific environment, one can expect a *nomic* explanation for why most of the parts of a living organism function the way they do. These rules are determined by the 'purpose' of survival and the regularities of the environment from which the creature evolved and in which it lives. An animal will breathe on a regular basis as long as the air is not noxious. This breathing requires the regular functioning of multiple organs and muscle groups, which in turn requires the proper functioning of countless cells. All of this is intelligible as part of a method for maintaining the energy required to do other things necessary for survival, such as gathering food, avoiding predators, and so on. The entire structure, more or less, of a living organism is intelligible in this way. It is an incredibly complex and incredibly harmonious thing—and, therefore, incredibly rich.

This, then, gives us a strong reason to think that richness could account for the value we generally give living beings. Does this help with the animal rights question?

Most us have strong intuitions that non-human animals deserve some moral respect. Indeed, the intuitions are strong enough that anthropocentric theories

have been somewhat successful in stretching their notions of value to include non-human animals. Rights-oriented theories have first reduced rights to having interests and then argued that animals have interests. Somewhat more plausibly, in my opinion, maximizers of preference or eudemonia have argued that animals have preferences and/or suffer pain and must therefore be accounted for in the maximizing calculations.

The theory that richness is the good certainly can explain the intuition that non-human animals are intrinsically valuable and, therefore, intrinsically deserving of moral respect. But our intuitions of the value of animals are more specific than the simple proposition "animals have intrinsic value." It is not just that we think animals matter, it is that we think certain animals matter more than others and that humans matter the most. Only the most extreme of us would rate the rights, suffering, and life of a mouse as highly as those of a human. But the individualist theories of animal rights can't account for this intuition. In fact, they generally attempt to *explain away* such feelings as speciesism. But accounting for a natural speciesism does not eliminate this intuition. No serious person is considering bringing mice into the benefits of the welfare state, for example. But, if a mouse has an interest in being alive, then it has exactly the same (inviolable) right to life as a human. If a mouse can suffer pain, its pain counts just as much as the pain of a human being.

So it is plausible that richness can account for the value of living beings. More importantly, maybe, it can capture the further and more specific intuition we have that certain living beings are more valuable than others. If so, it will have a leg up on traditional accounts of animal rights.

A natural way to capture our intuitive ranking of the value of various species is according to the species' apparent complexity. We value a mineral less than a plant, less than a worm, less than mouse, less than a bear, less than a human. Gregory Mikkelson has argued that one good richness proxy in this debate is the number of cell types a species has, cell types being able to stand in for the variety of functions and abilities an animal might have. "This richness proxy affirms that humans are special. Most if not all non-human organisms have fewer cell types than humans," says Mikkelson[22]. This does not mean that animals are not worthy of moral respect, of course, nor that humans will win every conflict between animal interests and human interests. Merely, our intuitive ranking of animal value matches our intuitive ranking of the richness of these animals. This strong correlation is powerful evidence that what we value in living beings *qua* living beings is their richness[23]. And, importantly, it gives us an account of animal value that does not fall prey to the problems that arise for traditional extensions of anthropocentric ethics.

Ecosystems

One of the deepest divides within the environmental ethics community is between holists and individualists—those who think that things like ecosystems have intrinsic value versus those who think that any value ecosystems have derives from the individuals affected by that ecosystem. This divide clearly maps

onto those who have tried to extend anthropocentric ethics to account for environmental value versus those who feel that such ethics will always be inadequate. For this reason, there have been few, if any, environmental ethics that can establish the intrinsic value of ecosystems and still support the traditional intuitions of human-centered ethics.

The theory that richness underlies all value can bridge this divide. Clearly, an ecosystem possesses richness. Ecosystems are massively complex, somewhat unified systems. In many ways, they mirror the structure of living organisms. Intuitively they are not as tightly unified as individual organisms, but they are unified to a degree. It is meaningful to talk about the harmony of an ecosystem. It is meaningful to talk about the interdependence of an ecosystem, how each part plays its 'role' in an overarching pattern. Ecosystems have some variety that individuals don't, the obvious being the variety of different organisms, each playing a role. Conversely, ecosystems lack some of the richness that individual creatures have, such as conscious awareness of the world and self-awareness, to name a couple of important features.

Again, then, we see that conceding value to ecosystems need not trump all human or individual interests. Likewise, conceding most of the tenets of traditional ethics need not require denying the important intrinsic value of ecosystems.

On a related note, it is clear that we also value the diversity of life in and of itself. This is easily explained by the value of richness: a functioning (unified) ecosystem with greater diversity is clearly richer than one functioning equally well, but with less diversity. The loss of a species is a significant decrease in the variety of the biosphere. This is a natural explanation of the value of biodiversity in our ecosystems.

Wilderness

The value of wilderness can also be captured by richness theory. In general, human intervention in an otherwise wild area disturbs the unity of the area. A soda can in the deep rainforest of Brazil is jarring: it doesn't belong there, just as a Metallica guitar solo doesn't belong in the *Ode to Joy*. Wilderness ecosystems have their own unified functioning that is almost invariably harmed by human intervention.

Again, none of these considerations are overriding in themselves. A less diverse but more unified ecosystem may be better than one with greater diversity. The value of timber may override the value lost in clear-cutting and replanting (although this becomes less and less true the more ancient the forests that are destroyed). And there may come a day when we learn to alter ecosystems for their own benefit, a day when we can build homes and lives so well integrated with the wild that they actually increase the beauty and value of the area.

CONCLUSION

The demands of pluralism, both politically and philosophically, put pressure on us to account for the full range of human value. Though this can at first seem theoretically daunting, it is also an opportunity. Indeed, it forces us into the methodological stance with which we should have begun. True value theorists need to give an account of all value. Many apparent problems in ethics and axiology may evaporate when we take account of the full range of evidence available to us. I hope that, at the least, I have shown the promise of such an approach.

It should be also obvious that we are not bound to traditional anthropocentric theories. Indeed, the limitations of these theories are so severe (explaining away or neglecting most of the value evidence) that we should abandon them immediately. This does not mean that we need to abandon the underlying intuitions that made them so useful; rather, we need to incorporate those intuitions into a broader theory. At least one plausible alternative is richness theory. It has been defended in various forms for millennia, and it promises to help us unite the various value realms.

NOTES

[1] Kelly, Christopher, "The Impossibility of Incommensurable Values," *Philosophical Studies*, vol. 137, no. 3, 2008, pp. 369-382.

[2] Osborne, Harold, *Theory of beauty; an Introduction to Aesthetics,* London, Routledge & K. Paul, 1952.

[3] Mackie, John L., *Ethics: Inventing Right and Wrong,* New York, Penguin Books, 1977.

[4] Oddie, Graham, *Value, Reality, and Desire,* New York, Oxford University Press, 2005.

[5] Stocker, Michael, *Plural and Conflicting Values*, Oxford, Oxford University Press, 1990, pp. 267-268.

[6] Kelly, Christopher, *A Theory of the Good*, Ph. D. Thesis, Boulder, CO, University of Colorado, 2003.

[7] Nozick, Robert, *The Examined Life: Philosophical Meditations,* New York, Simon and Schuster, 1989, p. 415.

[8] Plato, *Phaedrus,* edited by A. Nehamas, *et al.*, Indianapolis, Hackett, 1995, 264c.

[9] Dante, A., *Il convivio,* edited by G. Busnelli *et al.*, Firenze, Le Monnier, 1964, Iv3-15.

[10] Aristotle, *Poetics,* edited by D. W. Lucas, Oxford, Clarendon Press, 1968, VIII.51A 32-35.

[11] Hospers, John, "The Organic Conception in Aesthetics," *in* Paul Edwards (ed.), *Encyclopedia of Philosophy,* New York, Macmillan, 1967, p. 3.

[12] Aristotle, *Poetics, op. cit.*, VIII.51A 32-35.

[13] Lord, Catherine, "Organic Unity Reconsidered," *Journal of Aesthetics and Art Criticism,* vol. 22, no. 3, 1964, pp. 263-268.

[14] Nozick, Robert, *Philosophical Explanations,* Cambridge, MA, Harvard University Press, 1981, p. 416.

[15] Catherine Lord makes this point. She says, "[m]aximum unity tends to curtail variety. On the other hand, the greater the variety, the less unity there is likely to be. They vary inversely with one another." Lord, "*Organic Unity Reconsidered*", *op. cit.*, p. 268.

[16] Leibniz, Gottfried W., *Discourse on Metaphysics,* Manchester, Manchester University Press, 1953, p. 9.

[17] Kelly, *A Theory of the Good*, *op. cit.*.

[18] Aristotle, *Metaphysics,* edited by R. Hope, Ann Arbor, University of Michigan Press, 1966, V.11. 1019a 9-10.

[19] Kelly, *A Theory of the Good*, *op. cit.*.

[20] Monod, Jacques, *Change and Necessity: On the Natural Philosophy of Modern Biology*, New York, NY, Alfred A. Knopf, 1971, p. 142

[21] Gross, Michael, *Life On The Edge: Amazing Creatures Thriving In Extreme Environments*, New York, NY, Plenum Trade, 1998, p. 1.

[22] Mikkelson, Gregory, "Weight Species," *Environmental Ethics,* Volume 33, no. 2, 2011, pp. 185-196.

[23] "Thus the ranking of organisms in accordance with degree of organic unity matches our value ranking of them, with people above other animals above plants above rocks." Nozick, *Philosophical Explanations, op. cit.*, p. 243.