

The Moral Worth of Creatures:
Neo-Classical Metaphysics and the Value Theories of
Rolston and Callicott

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ABSTRACT

After showing that Rolston's and Callicott's value theories are fundamentally flawed, I demonstrate that a value theory grounded in neoclassical, or process, metaphysics avoids the problems in, and incorporates insights from, these accounts. A fundamental thesis of neoclassical metaphysics is that individual creatures at all levels of reality (from non-sensuous, non-conscious to self-conscious) are subjects of experience. Since individuals are subjects, this value theory meets Callicott's legitimate demand that value requires a valuer. And because such subjectivity does not depend on consciousness, this theory meets Rolston's legitimate demand that intrinsic value not depend upon human valuation.

KEYWORDS

Environmental ethics; moral worth; intrinsic value; metaphysics

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In this paper, I draw on the value theory grounded in neoclassical, or process, metaphysics to demonstrate its fruitfulness in resolving problems that plague, as well as unifying important insights of, two leading theories of the intrinsic value of non-human entities.¹ One of the fundamental theses of this metaphysics is that entities at all levels of reality – from non-conscious, non-sensuous, to sensuous, non-conscious, to conscious, to self-conscious – are subjects of experience. Since, on this metaphysics, subjectivity is the basis of intrinsic value, such entities are worthy of direct moral consideration by human beings. Gaining clarity on the source of value of other creatures is a worthwhile task because our view of the worth of such creatures impacts on how we interact with them and how they are taken into account in our decision making.

The debate I wish to enter involves two prominent theorists, Holmes Rolston, III and J. Baird Callicott, who argue, in different ways, for non-anthropocentric value theories. These thinkers agree that not all (intrinsic) value is centred in the human being. The fundamental difference between them lies in their disagreement over whether the intrinsic value of other creatures is objective and autonomous, or subjective and attributed. Rolston argues that there is objective, nonanthropocentric, nonanthropogenic value in the natural world, value that is utterly and completely free from human evaluation or even human existence; indeed, such value may be free from all subjectivity. It is out there in nature and human beings ought to respect it. Rolston rejects any suggestion that human beings are the source of value. He believes such a theory is not only mistaken but also finally arrogant.² For Rolston, the intrinsic value of non-human creatures is utterly independent of human valuation. In this, he is right.

Callicott cannot make sense of value that exists independently of valuers, and so casts his own value theory in subjective terms, specifically, in terms of human beings valuing non-human creatures intrinsically, without further contributory reference (e.g., to human utility or pleasure or aesthetic enjoyment, etc.). Such creatures are valuable for themselves, but not in themselves. In this theory, value is anthropogenic, or generated by human beings, but not anthropocentric since other creatures can be valued intrinsically, or for their own sakes. Human beings are the source of value, but not the sole locus of value.³ Callicott holds that the only philosophically defensible value theory is one in which the ascription of value requires a subject capable of valuing. In this, he is right.

Rolston and Callicott are each right where they take themselves to disagree, but wrong where they agree. And it is by challenging their point of agreement that we can develop a theory that unifies their seeming disa-

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gements. What these thinkers have in common is the belief that valuing requires consciousness or, to put the point another way, that subjectivity is coincident with consciousness, so that valuing and subjectivity 'go down' only so far as consciousness. For Rolston, who seeks an objective value theory, this entails that intrinsic value must not depend on subjectivity. For Callicott, who cannot make sense of such a theory, this entails that intrinsic value must be conferred by subjects (and, finally, human subjects).

Rolston's insight that intrinsic value does not require *human* subjectivity is important, but his argument that intrinsic value does not require *subjectivity* renders his theory incapable of supporting his claim that objective life has any moral significance. Callicott's insight that intrinsic (or inherent) value requires *subjectivity* is important, but his argument that such value depends, finally, upon *human* subjectivity renders his axiology incapable of avoiding an untenable – and self-refuting – relativism. It is these insights – that intrinsic value does not require human subjectivity but it does require subjectivity – which I seek to redeem by grounding them in neoclassical metaphysics. And it is only in that limited sense that I seek to unify aspects of these thinkers' respective theories.

Drawing on neoclassical metaphysics, especially as articulated by Alfred North Whitehead, I begin with the thesis that subjectivity characterises entities at all levels of reality, including non-conscious entities. Put more precisely: metaphysically fundamental units of reality, the ultimate ontological units of existence (or 'actual entities'), are all alike *subjects* of experience constituted by internal relations to past subjects, which relations they integrate into one felt whole, thereby conditioning the future. As subjects, this thesis meets Callicott's legitimate demand that value requires a valuer. And because such subjectivity does not depend on consciousness, it meets Rolston's legitimate concern that the intrinsic value of non-human creatures be utterly and completely independent of human valuation.⁴

Before turning the roadmap for the remainder of this paper, I offer (1) a cursory overview of the neoclassical understanding of these ultimate units of existence and their relation to the macroscopic objects of everyday life, as well as (2) a brief argument in support of the thesis that subjectivity is a metaphysical characteristic. Neither this overview nor this argument is meant to be exhaustive, but only to provide a framework for the analysis to follow and to give some support for its plausibility.

The momentary event is the actual entity that neoclassical metaphysics takes to be metaphysically fundamental. If you consider a moment of experience in your own life, you encounter an actual entity. Roughly, actual entities in the process of becoming are the present drops of experience of

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every entity in the universe. The 'being' of an actual entity is its becoming. *It is this becoming that exists in the full sense, and so is the central concern of metaphysics.* 'Feeling' is a specialised term (or, perhaps more accurately, a completely generalised extension of the everyday use of the term) employed in neoclassical metaphysics to convey the notion that actual entities are both affected by their environment and take in and integrate their environment in a manner that is not fully determined by that environment. Neoclassical metaphysics does not begin with an enduring subject that encounters data, but rather with data that is 'met with feelings, and progressively attains the unity of a subject'.⁵ The data is felt and directed *towards* an organism as that which will be the outcome of integrating the data. It is this process of meeting the data and integrating it into one final 'satisfaction' that *is* the actual entity. It is only in this droplet of experience, this momentary event, that the individual is fully concrete and actual. And, as a subject, such an individual integrates the data of its experience with some degree of autonomy, however trivial.⁶

Whitehead employs the term 'society' to describe the order among actual entities, which order we perceive in the macroscopic objects of everyday life. A society is an environment with some element of order (for its members) that persists because of the relations between its own members.⁷ Whitehead conceives of reality as composed of layers of social order. No society exists in isolation. 'Every society must be considered with its background of a wider environment of actual entities, which also contribute their objectifications to which the members of the society must conform'.⁸ The background environment contributes the general characteristics that a specialised society presupposes for its members. The widest societies – the extensive continuum, the geometrical society and the electromagnetic society – cannot provide adequate order for the production of individual actual occasions with peculiarly intense subjective experience. For this, more specialised societies are needed because these societies are the vehicles of such order.⁹ 'The most general examples of such societies are the regular trains of waves, individual electrons, protons, individual molecules, societies of molecules such as inorganic bodies, living cells, and societies of cells such as vegetable and animal bodies'.¹⁰

With that cursory introduction to actual entities and their relation to the objects of everyday life, I turn now to a brief argument to support the plausibility of the metaphysical character of subjectivity.¹¹ Statements or claims about reality (i.e., existential claims) can be divided into those that are (1) partially negative and partially positive; (2) wholly positive; and (3) wholly negative. Beginning with the first, any empirical or non-metaphysical existential claim

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denies some reality, at least implicitly. For example, the claim 'there is an elephant in the room' implies that the room is not empty; the room is not devoid of living things; etc. Alternatively, every factual existential claim is at least partially positive. For example, the claim 'there is no elephant in the room' implies that there is a room; that the space in the room is occupied by something other than an elephant (e.g., some air, a chair, a bear); etc. In other words, ordinary factual statements are partially negative and partially positive. If they are positively stated, they still implicitly deny something. If they are negatively stated, they still implicitly affirm something.¹² It is this latter fact that is especially important for our analysis.

In addition to partially positive existential statements, there are existential statements that are completely non-restrictive or wholly positive. These statements are the province of metaphysics, which explores what 'all possibilities of existence have in common'.¹³ True metaphysical claims avoid conflict with all existential possibilities, and metaphysical features of existential possibilities cannot be unexemplified. For example, the statement 'something exists' is a metaphysical claim. It is included in, or presupposed by, the meaning of any partially positive statement. Both the claims 'there is no elephant in the room' and 'there is an elephant in the room', for instance, entail the affirmation of the existence of the room, walls, ceiling, etc. – i.e., the affirmation that 'something exists'.

In addition to partially positive and wholly positive existential statements, there are wholly negative existential statements. For instance, the claim 'nothing exists' is a sheerly negative existential claim. But since 'nothing' is not the name of some entity, it cannot conceivably be experienced since the experience itself would have to exist. Such a statement cannot conceivably be verified by any possible existent, including the divine. And since verifiability (in the broad sense that the referent in the statement must be capable of being the object of *some* experience) is a suitable general criterion of meaning, such sheerly or wholly negative existential statements are meaningless.¹⁴ They are mere verbiage, a senseless combination of words. In other words, a thought must have content, something that the thought is about. Wholly negative existential statements are the denial of *any* content. As such they are without meaning.

This analysis can now be used to support the conclusion that experience or subjectivity is a metaphysical category characterising all true individuals. One way this can be done is through a brief discussion of metaphysical dualism. Metaphysical dualism is philosophically incoherent because it posits the existence of two types of entities that are fundamentally or metaphysically different, such that they share no common characteristic. Such dualism is

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committed to making a sheerly negative existential claim about one or the other side of the metaphysical divide simply because there is no higher category (recall that the divide is metaphysical) in terms of which the two types of entities can be compared or be the object of thought. Often, it is the denial of subjectivity that divides metaphysical schemes into subject/object, mind/matter, etc. – and thereby metaphysically separates human beings from the rest of reality. Given the incoherence of a dualist metaphysical scheme and given that human beings are subjects of experience, an untenable dualistic metaphysical scheme is avoided with the proposition that all true individuals are subjects of experience.

This same conclusion can also be arrived at directly from the above analysis of existential statements. The mere absence of the experience, of the subjectivity, of an individual is a sheerly negative existential statement that is verifiable by no possible experience. The sheer absence of experience has no positive bearing, no positive implication. Therefore, the claim that ‘entities without experience exist’ is a meaningless claim. It is sheer negation. Consequently, its contradictory – ‘all individuals are subject of experience’ – must be a true metaphysical claim.

In addition to, and continuous with, these philosophical arguments, the argument that subjectivity characterises all levels of reality is supported by the empirical evidence. Contemporary science, for instance, has arguably shown that reality is fundamentally indeterminate, rather than mechanistically determined as classical physics would have it.¹⁵ This finding coheres with the claim that all final real things determine themselves to some degree. Further, research over the past few decades has also shown the continuity of mind and matter – calling into question any sharp separation. For instance, recent experiments in which monkeys move objects by their thoughts via a probe implanted in their brain supports the notion that there is continuity, rather than separation, between the mind (the supposed sole realm of freedom) and physical matter (the supposed realm of objects devoid of freedom).¹⁶ Again, recent experiments that tend to show that other creatures have some degree of self-awareness lend support to the notion that freedom or subjectivity exists on the sliding scale rather than as an ‘either/or’.¹⁷ This understanding is also supported by the finding that other creatures, such as orangutans, engage in cultural learning.¹⁸ These arguments, of course, are not conclusive since empirical findings may falsify or may support, but can never fully validate, a metaphysical claim (i.e., a claim that purports to be universally applicable). Still, the empirical findings noted above do offer some support for – or at least are consistent with – the claim that freedom or subjectivity is metaphysical or characterises entities at all levels of reality.

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(Looking at the matter from the opposite direction, this metaphysical framework can integrate or embrace, and make sense of, these research findings in a way that, say, a mechanistic or dualistic metaphysics probably cannot. They are findings that one would expect if one starts from the vantage point of neoclassical metaphysics.)

Taken as a whole, this empirical research enhances the plausibility of the claim that all individuals are subjects of experience, with some degree of autonomy or self-determination. Any metaphysical or universal claim in the end, of course, rests on a philosophical justification – such as those offered in summary form above. The philosophical arguments and empirical research can perhaps be summarised as follows: ‘We have no direct experiential basis for saying that there are any vacuous actualities, actualities devoid of experience. We do not even have any empirical basis ... for assigning a meaning to the assertion that there are actual things devoid of experience, because we can have no hint as to what they might be in themselves’.¹⁹

With that cursory defence of the proposition that subjectivity is a metaphysical characteristic, let me now offer a roadmap for the remainder of this paper. In the first section, I take up a discussion of Rolston’s understanding of value in the natural world. I then articulate some criticisms that vitiate the conclusions of his work. I argue that his understanding of the intrinsic goodness of creatures does not directly entail that they have moral worth (or are worthy of direct moral consideration by human beings), as he assumes.²⁰ In the second section, I lay out Callicott’s position and its attendant problems. I argue that in addition to the Cartesian dualism that Callicott himself admits makes his position problematic, Callicott’s ethic finally collapses into relativism. At the conclusion of each section, I show how neoclassical metaphysics both integrates important insights of these thinkers while avoiding problems that plague their accounts.

ROLSTON’S OBJECTIVIST VALUE THEORY

The foundation of Rolston’s environmental ethic centres especially on his axiology, his argument for the objective intrinsic value of nonhuman creatures and systems. His arguments for the intrinsic value of non-human creatures and the ‘systemic value’ of the ecosystem are many and varied. Following each of his labyrinthine, and at times poetic, persuasive, and powerful, arguments is not necessary because there is a core argument (or cluster of core arguments) on which hinge the rest. Although Rolston maintains that non-organic entities may have intrinsic value²¹ and ecosystems have ‘systemic

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value', his fundamental arguments concern the value of living things. From these arguments he works backward, so to speak, to the value of the non-biotic things from which life arose and to the systemic value of the system that produces such valuable things. With respect to systemic value, which qualifies his ethic as 'holistic' insofar as ecosystems are given moral standing, the movement in his major works is to argue for the intrinsic value of living things and then to maintain that the system that 'pro-jects' such value must itself be of value. 'We look for a system able to produce and support value, and ask whether that ability is a value in itself, and also a value for those it produces and supports'.²² Rolston coins the term 'systemic value' because the terms 'instrumental value' and 'intrinsic value' do not seem to apply since the system 'is a value producer, it is not a value owner'.²³

The success of Rolston's defence of 'systemic value' depends upon the success of his defence of the value of living things. And the success of his defence of the intrinsic value of natural places or non-biotic things depends upon the success of his defence of either the value of system that produces them or the value of living things. For example, he maintains that 'a 'mere thing' can ... be something to be respected, *the project of creative nature*'.²⁴ Again, 'natural places can be loci of value *so far as they are products of systemic nature* in its formative processes. ... There is value wherever there is creativity'.²⁵ (Since I defend a thesis that sounds much the same as 'there is value wherever there is creativity', it is important to be clear that the meaning Rolston attaches to this notion is different than my own. Rolston means, so far as I can tell, there is value wherever something is a result of the creative systemic process. My use of this notion means there is value wherever an individual creature acts creatively or freely.)

The important point for now is that Rolston's objective value theory ultimately rests on his defence of the intrinsic value of creatures that, in his judgment, lack subjectivity. This is because (1) he defends a non-subjective value theory, (2) his defence of the notion of 'systemic value' only has merit if there is something of value that is produced, and (3) his defence of the intrinsic value of non-biotic things or places rests on his notion of the value of the system that created them and the value of the life that depends upon them. Consequently, in offering a brief outline of Rolston's value theory, I focus on his discussion of the value of organisms that he considers to be below the level of sentience.

Rolston claims that 'in an objective account value is already present in presentient organisms ... prior to the emergence of further dimensions of value with sentience'.²⁶ The 'objectivity' of Rolston's theory depends upon his success in making this argument because it is here, at the lower levels of

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life, that creatures lack, on Rolston's account, subjectivity or are 'presentient'. Any intrinsic value they possess must be 'objective' or independent of subjectivity. The precise line between subjects and objects, between sentience and insentience, may be difficult to draw, but, Rolston holds, 'most persons judge sentience to accompany approximately the central nervous system and thus to be absent in flora and protozoans, lower invertebrates, and probably those forms with nerves and ganglia but little or no brain'.²⁷ That this understanding coincides with his own position is clear when he states such things as 'centers of experience vanish with simpler animals'.²⁸

With these preliminaries, let me turn to Rolston's description of his own project. I then take up his defence of the existence of 'objective' values in nature, which, as noted, centres on his defence of intrinsic value of living creatures below the level of sentience. Rolston defends a theory of '*autonomous intrinsic value*',²⁹ value that is utterly independent of valuing consciousness or subjectivity. 'Some values', he argues, 'are objectively there – discovered, not generated by the valuer'.³⁰ Rolston holds that as we move down the organismic levels, we give up any notion of 'rights' and abandon the legal analogy of 'moral standing'. 'But what remains', he insists, 'is the conviction that there is value, standing on its own, to which appropriate (= right) behavior is owed when those capable of duty meet such free-standing value'.³¹ Value in nature is 'free-standing' and does not depend upon valuation. We 'encounter' it. Rolston, then, *rejects* what he views as the reigning paradigm, according to which, he maintains, 'there is no value without an experiencing valuer, just as there are no thoughts without a thinker, no percepts without a perceiver, no deeds without a doer, no targets without an aimer'.³² Rolston, in opposition to this view, holds that 'the existence of unexperienced value (undiscovered vitamins, genes anciently beneficial to dinosaurs, cougar predation keeping the deer herd healthy) is not a contradiction in terms, unless one builds into the meaning of value that it must be experienced. We must not beg the objectivity in value'.³³ That there can be 'unexperienced value' is central to his objective value theory because this theory espouses the view that living creatures devoid of experience nevertheless have intrinsic value. As he puts it, 'in an objective gestalt some value is already present in nonsentient organisms, ... prior to the emergence of further dimensions of value with sentience'.³⁴

Turning to Rolston's understanding of such value, he begins with this distinction: 'two different philosophical perspectives are possible when a valuing agent (a valuer) encounters an x in the world: (a) what is x good for? and (b) what is x's own good? The first is a question about instrumental value, the second about intrinsic value'.³⁵ Using this as his starting point,

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Rolston's central move in his value theory is simple. He states flatly, 'Beyond dispute, animals and plants defend a good of their own, and use resources to do so. ... They promote their own realization... Every organism has a *good-of-its-own*; it defends its kind as a *good kind*'.³⁶ He goes on to make the value claim explicit: 'A life is defended for what it is in itself, without necessary further contributory reference ... There is intrinsic value *when a life is so defended*. That is ipso facto value in both the biological and the philosophical senses, intrinsic because it inheres in, has its focus within, the organism itself'.³⁷ Rolston assumes that the demonstration that something has intrinsic value entails that it has moral worth. It is worthy of direct moral consideration. 'Whatever has such resident value *lays a claim* on those who have standing as moral agents when they encounter such autonomous value'.³⁸ So if we can show that a creature has a good of its own or can give a cogent answer to the question 'what is x's own good?' then that creature has intrinsic value. And Rolston maintains that whatever has such value, whatever has a good of its own, likewise has moral worth. Thus, since all living things defend their own lives, they have a good of their own, and so have intrinsic value and moral worth.

According to Rolston, 'we can speak of objective intrinsic value wherever a point event – a trillium – defends a good (its life) in itself'.³⁹ This notion of intrinsic value applies to all living things, whether sentient or not. Therefore, Rolston can argue that 'value attaches to a nonsubjective form of life, but is owned by a biological individual, a thing-in-itself. These things count, whether or not there is anybody to do the counting. They take account of themselves'.⁴⁰ Non-sentient creatures 'may have no autonomous options, but they defend a life as a good-of-its-kind'.⁴¹ They are intrinsically valuable. This value theory is clearly objective in a strong sense. There can be unexperienced values – the *intrinsic* value of creatures utterly devoid of experience. The value is there, according to Rolston, whether or not there is any valuer to appreciate it.

In turning to a critical examination of Rolston's value theory, let us begin by examining Callicott's criticism of Rolston. Callicott's basic critique is that 'the pounding incoming waves of Rolston's scientifically informed arguments for objective, intrinsic value in nature, run counter to the ground sea of the metaphysical foundations of Modern science – which he unquestionably assumes and even explicitly affirms'.⁴² So, Callicott argues, on the one hand, Rolston assumes and affirms these metaphysical foundations, and, on the other hand, his objective value theory runs counter to these foundations. Callicott enumerates three relevant metaphysical foundations: (1) the Cartesian split between *res extensa* and *res cogitans*, between extension and

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thought, between object and subject, (2) the Galilean distinction between primary and secondary qualities, and (3) the Humean distinction between fact and value.

Callicott argues that the value-neutrality of nature is an immediate inference from the metaphysical foundations of Modern science. Nature is the world of objects which themselves only have primary qualities, such as mass, extension, etc. As such, it is the world of facts, devoid of value. Value is brought to the valueless world of objects by the valuing subject. Therefore, Callicott maintains, '[T]he only way that Rolston could really convince us that value exists independently in the natural world would be to provide a persuasive alternative to the integral set of Cartesian-Galilean-Humean assumptions that render the subjective provenance of value so fundamental to the Modern scientific outlook'.⁴³ Though Rolston challenges the Humean fact-value distinction, Callicott argues, '[H]e does not take up arms against the Cartesian object-subject duality – the very castle keep of the subjectivity of values – in respect to which the Humean fact-value distinction is but a footnote. That remains an altogether unchallenged substrate of his [i.e., Rolston's] dissertation'.⁴⁴

Rolston at least implicitly assumes just this subject-object duality in his search for objective intrinsic value literally 'out there' in nature, value in *objects* utterly independent of subjectivity. There is, Rolston asserts, 'subjective life' and 'objective life'. Subjects are living things that are also centres of experience, with at least some degree of autonomy. Living objects are living things that are not centres of experience and are devoid of autonomy.⁴⁵ One of Rolston's goals, arguably his primary goal, is to demonstrate that objective life has intrinsic worth and so is worthy of direct moral consideration.

In response, one might defend Rolston by arguing that Rolston has expended considerable energy seeking to demonstrate that any such ontological dualism (between subject and object) has no axiological impact because even objective life is intrinsically valuable. In effect, Rolston's position is that *regardless* of any dualism inherent in his thought, he has *demonstrated* on these very grounds that objective life is intrinsically valuable, intrinsically good. That is, Rolston has *demonstrated* that (living) *objects*, in fact, have intrinsic value. For Callicott to maintain, without further argument, that this conclusion is inconsistent with the foundations of Rolston's own project, then, amounts to a mere assertion. For Callicott's argument to be successful, he must *demonstrate* how Rolston's subject-object divide undermines *Rolston's* claim that intrinsic value cuts across this divide.

Still, the dualism at the heart of Rolston's ethic is directly to the point, and I now want to explore *how* Rolston's dualism vitiates his claim to have

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secured the moral worth of objective life – a task Callicott leaves undone. Rolston's ontological dualism makes tenuous the link between the *intrinsic goodness*, the goodness a creature has in and for itself, and *moral worth*, the moral demand that human beings take account of the good of that creature in their actions. Alternatively put, on Rolston's ontology, moral worth does not necessarily follow from intrinsic goodness. What Rolston wants is an understanding of intrinsic value that directly entails that a creature with such value is worthy of direct moral consideration, or has moral worth.

But this inference is forthcoming only presupposing an adequate metaphysics. Consider for a moment a comparison between the project of Rolston and the project of Thomas Aquinas. It is possible to view Rolston's articulation of the intrinsic value of all living creatures as an empirical reflection of a metaphysics similar to that of Thomas. For Thomas, the fact that all creatures are ontologically or intrinsically good means that they seek to preserve and augment their *own* being; this is so because being is convertible with goodness and only the good seek the good. So, in his ontology, Thomas affirms the goodness of all creatures. '[E]very being, as being, is good'.⁴⁶ But, in his moral theory, Thomas makes it clear that non-rational creatures are strictly instrumental to the human good. It is morally permissible for human beings 'to make use of [animals], either by killing them or in any way whatsoever'⁴⁷ and cruelty to animals is forbidden *only* because it might lead to harm of a human being.⁴⁸ Once we grant his own dualism, Thomas can *consistently* hold that all creatures are ontologically (or intrinsically) good *and* only human beings have moral worth. Similarly, there is no reason *not* to hold, on Rolston's grounds, that all living things are intrinsically good (in the sense that each thing seeks its own good) *and* only (perhaps) subjective life has moral worth.

A crucial similarity between Rolston and Thomas is that they both understand creatures below a certain level to be devoid of experience – mere objects. This dualism is central to Thomas' claim that all creatures are ontologically good *and* only human beings have moral worth. Creatures are ontologically or intrinsically good insofar as they seek to preserve and augment their own being. But this has no implications for how human beings ought to treat them; that is, it tells us nothing about their moral worth. Still, the notion that they are mere objects does lend itself to the conclusion that they are suited to be mere instruments for human beings – that they do not have moral worth.

Rolston's claim that a living thing defends its life as a good-of-its-kind may, depending on the underlying metaphysics, imply that that thing is ontologically or intrinsically good, but there is no reason to conclude that

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it has moral worth, that human beings are likewise obligated to defend its life or seek its good. One might endorse all that Rolston has to say about objective life without ever drawing his inference that '[w]hatever has such resident value *lays a claim* on those who have standing as moral agents when they encounter such autonomous value'.⁴⁹ One need not draw the inference that creatures with intrinsic value have moral worth. Their existence may be for the sake of another, as it is on Thomas' account. The bare notion that something has a good of its own, or intrinsic value so understood, does not necessarily entail that it has moral worth.

And it is precisely Rolston's dualism that opens this possibility of separating intrinsic value from moral worth. Rolston argues that any living thing is a good kind and a good of its kind because it seeks to preserve and enhance its own existence. Rolston asks: Why is subjective life, or a living thing that is a centre of experience, valuable, but not objective life, or a living thing that is not a centre of experience? After all, objective life (1) is a necessary precursor of subjective life and (2) it, too, defends a good of its own.⁵⁰ The short answer is that the dominant paradigm is correct: value requires a valuer *if the value in question is to entail moral worth*.⁵¹

Ernest Partridge offers the following helpful analysis: 'without minimal feeling and awareness, nothing can 'matter' to a being... '[M]ere things' may be said to be 'good' in the sense of having properties 'deemed good' by others. But 'goodness of' these beings cannot be 'goodness for' them, if that 'goodness' makes no difference to them. To make a difference to them that is a good (or bad) for them (for them to have 'sakes' or 'interests'), beings must have what Feinberg calls 'rudimentary cognitive equipment'. Conversely, nothing that happens to X matters to X, if X is irrevocably insentient and non-conscious'.⁵² To this, I would make two corrections: (1) 'rudimentary cognitive equipment', if by that is meant some sort of nervous system, is not a necessary precondition for subjectivity or experience and (2) metaphysically ultimate entities are subjects of experience, but not necessarily conscious. It is subjectivity and not consciousness that is required for something to be 'goodness for' an entity, for something to matter to an entity. With these corrections, Partridge's insistence that subjectivity is required for something to matter to another thing, and so for the ascription of moral worth to that thing to be sensible, is on target.

Rolston has failed to make his case, and it is difficult to see what kind of metaphysics would allow him to do so if he denies all final real things are subjects. Subjectivity, understood as a metaphysical variable, allows for the development of an understanding of intrinsic value that *does* entail that a creature having such value has moral worth. As *metaphysical*, subjectivity

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characterises all levels of reality – from inanimate (e.g., electrons) to non-conscious, living creatures, to conscious living creatures to self-conscious creatures (i.e., human beings). As a *variable*, subjectivity varies between different kinds of creatures; that is, different kinds of creatures would have diverse capacities for richness of experience – from trivial to outrageous.

On this metaphysics, *every* creature is a subject that pursues the same telos of creativity, each according to its own capacity; each creature is in some measure free and creative. Since creativity, as the *telos* of the universe, is the good to be pursued, for human beings the pursuit of creativity is rationally required; it is the *moral law*. This moral law binds human beings to seek to maximise the conditions necessary for the exercise of creativity as such, so that any entity that is self-creative or in some measure free falls under the moral law or has moral worth. Subjectivity characterising all levels of reality is necessary to secure *moral worth* of all creatures; it is necessary to secure the link between intrinsic goodness and moral worth.

Insofar as Rolston's theory fails to hold that subjectivity characterises entities at all levels of creation, it fails to secure moral worth for creatures below what he takes to be the level of subjectivity. (We might note that a significant problem here is the equation of subjectivity with consciousness.) With this failure, Rolston's attempt to demonstrate the moral worth of all living beings (and, derivatively, some non-biotic portions of creation) fails. Because of the bifurcation between subject and object, we have no reason to affirm that the intrinsic goodness (defined in terms of a creature seeking to defend and augment its *own* life) of objective life has any moral significance for human beings.

CALLICOTT'S SUBJECTIVIST VALUE THEORY

If Rolston fails to secure the link between intrinsic value and moral worth, the same cannot be said of Callicott. For Callicott, a necessary condition for something to have intrinsic value is that it be valued 'intrinsically' (or for itself) by human beings. Intrinsic value (or, as Callicott calls it, 'inherent value') is conferred by human beings valuing something for what it is in itself, and not for anything it can contribute to other creatures, including human beings. On Callicott's ethic the moral worth of creatures, properly understood, simply *is* their being valued intrinsically.

However, the same thing that secures the link between intrinsic value and moral worth is also the central problem for Callicott's ethic. Callicott understands the intrinsic value of something as necessarily *conferred by*

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subjects (and finally human subjects) rather than a thing being intrinsically valuable because it *is* a subject. This understanding of intrinsic value leads finally to an untenable relativism. Callicott attempts to escape this relativism by covert appeal to transcendental standards of assessment, which appeal undermines his entire empirically-based ethic by placing the ground of the moral judgments in reason.⁵³

Callicott's land ethic is holistic. The primary locus of value is 'the whole' or 'the community', and action is assessed according to its contribution to the wellbeing (specifically, 'the integrity, stability, and beauty') of the biotic community. In a well-known essay written in 1980, Callicott quotes Aldo Leopold as providing, 'a concise statement of what might be called the categorical imperative or principal precept of the land ethic: 'A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise'.⁵⁴ He adopted this maxim as the central moral norm of his own ecological ethic.

Still, Callicott has had occasion to reformulate this first principle of the land ethic in sensitive response to criticisms as well as to developments in ecology and sociobiology. For instance, Callicott has accepted that the principal moral maxim of the land ethic ought not to call for stability. But he is less willing to concede that the notions of integrity and community must be given up. In a passage that reflects his communitarian commitments, he maintains that 'human communities are no more integrated, no less dynamic, nor any easier to demarcate than biotic communities as represented in deconstructive ecology'.⁵⁵ But since these human communities 'are still recognizable entities and engender moral duties and obligations',⁵⁶ then biotic communities are 'sufficiently robust to engender analogous environmental duties and obligations'.⁵⁷ Callicott does concede, though, that the dynamic nature of the biotic community makes 'preserving' its 'integrity, stability, and beauty' problematic. He argues that the key to dynamising the land ethic is the concept of 'scale', which includes both rate and scope. 'Temporal and spatial scale in combination are key to the evaluation of direct human ecological impact'.⁵⁸ With this in mind, he offers the following revised summary moral maxim for the land ethic: 'A thing is right when it tends to disturb the biotic community only at normal temporal and spatial scales. It is wrong when it tends otherwise'.⁵⁹

Given that overview of the central maxim of Callicott's moral theory, I want now to focus more particularly on his axiology. Callicott espouses a subjective and affective value theory, whose roots he traces to Hume and Darwin. For the present conversation, I will not be concerned with whether Callicott has accurately interpreted Hume or Darwin.⁶⁰ The point here is

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to gain clarity on Callicott's own position. Callicott does not believe there can be any intrinsic value that is 'objective and independent of all valuing consciousness'.⁶¹ He insists, 'there is no value without a valuer... Something *has* value, in other words, if and only if it is valued'.⁶² Consequently, Callicott's position is that 'intrinsic value is subjectively conferred – that is, if there existed no valuing subjects, nothing would be of value, intrinsic or otherwise'.⁶³

It is here that Hume's theory of the moral sentiments comes in. Hume grounds morality in empirical or emergent feelings.⁶⁴ 'According to Hume', Callicott writes, 'one may have a strong emotional attachment to one's own interests, but such an attachment is entirely contingent. It is possible, indeed, that one may also have strong feelings for the interests of other beings'.⁶⁵ So human beings may value other beings for themselves, or intrinsically. It is this valuing that is the source of the intrinsic value of nonhuman creatures or ecosystemic wholes. Callicott offers this summary statement: 'the *source* of all value is human consciousness, but it by no means follows that the *locus* of all value is consciousness itself or a mode of consciousness like reason, pleasure, or knowledge. In other words, something may be valuable only because someone values it, but it may also be valued for itself, not for the sake of any subjective experience (pleasure, knowledge, aesthetic satisfaction, and so forth) it may afford the valuer. Value may be subjective and affective, but it is intentional, not self-referential'.⁶⁶ Intrinsic value has its source in human consciousness, not in extra-cognitive reality.

Yet there is an ambiguity here. Callicott, at times, indicates that *any* conscious creature can be the source of value. He states, for example, that 'values in fact depend ... on consciousness (whether human or nonhuman)'⁶⁷ and 'there is no value independent of valuing consciousness (both human and nonhuman)'.⁶⁸ Callicott, at least in one essay, refers to his value theory as 'vertebragenic' (i.e., vertebrates as the source of value since 'nonhuman animals, all vertebrates at the very least, are conscious and therefore may be said, in the widest sense of the term, to value things'⁶⁹) rather than 'anthropogenic' (i.e., human beings as the sole source of value).

But Callicott's axiology, so far as I can tell, depends not simply on consciousness, but on *human* consciousness. He seeks a subjectivist theory of inherent value. Even assuming that (some) non-human creatures can value other creatures inherently and that we could have access to this fact – both *highly* speculative assumptions – it is not clear what this would mean for Callicott's axiology: Should we value inherently what other creatures value intrinsically? If so, why? Or is the point that we should value inherently those creatures that are capable of valuing inherently? That is, does this capacity

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entitle them to be inherently valued so that their inherent value is, after all, *objective*? Does the very fact that they can project value entail that they are inherently valuable? None of these are possible if Callicott's ethic is to remain subjective with inherent value affectively conferred. I have sought to present Callicott's ethic in its strongest form. But his claim that intrinsic or inherent value is 'vertebragenic' thoroughly vitiates the usefulness of his argument that value is subjectively projected onto natural things. To be sure, it responds to the criticism that he has privileged human beings over other vertebrates. But it does so at the cost of virtual absurdity. To repeat the criticisms above in a slightly different form: If any vertebrate can project intrinsic or inherent value on to other creatures, then what does this mean for how human beings ought to treat the creature onto which such value is projected? Callicott's attempt to solve a particular problem has introduced a much larger problem – if cultural relativism is a problem for his theory, as I argue below it is, then now he has the problem of something like 'species relativism'. Whose projection of value are we to live by and how are we even to know what the projected value of another creature is? And if these issues are somehow not important for his value theory, then why introduce this notion of the 'vertebragenic' projection of value?

Callicott articulation of the notion that value is projected by any vertebrate is cursory, undeveloped, and riddled with problems. And Callicott himself seems clear that, in the end, his own ethic is rooted in *human* consciousness. In summary form, Callicott maintains, 'nonhuman natural entities and nature as a whole may be valued not only for what they do for us, but ... also ... for their own sakes'.⁷⁰ Callicott, as he states, tries 'to pass this altruistic species of value off as 'truncated intrinsic value'... Truncated intrinsic value [Callicott's understanding of the only kind of intrinsic value that can be philosophically validated] is the value *we* ascribe to something *for* itself even if it has – since nothing does ... – no value *in* itself'.⁷¹ The inherent value of an entity or a whole depends solely upon human beings valuing something for its own sake.⁷²

One of the primary strengths of a Humean, sentiment-based ethic, from Callicott's point of view, is that it provides for the possibility of intrinsically valuing 'wholes', such as human communities or biotic communities or ecosystems. Callicott holds that holism is this ethic's principal asset.⁷³ Hume, he maintains, provides a theory according to which 'wholes', such as species, ecosystems and the biotic community, can be valued intrinsically and so have intrinsic value.⁷⁴ Callicott believes such holism is important because so many of the ecological problems we face – such as 'the current episode of abrupt, massive anthropogenic *species* extinction'⁷⁵ and

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‘the incremental eradication of *ecosystems*’⁷⁶ – concern wholes. He states baldly: ‘An environmental ethic that cannot provide moral considerability for wholes – for species as well as specimens, for ecosystems as well as their components – is ... of little practical interest’.⁷⁷ This is an important issue to which I will return.

We can now ask: if this ethical theory is grounded in empirical feelings or sentiments, then does not the ethic collapse into relativism? As Callicott puts it: ‘If ethics, as Hume ... says, is ultimately a matter of taste (!), then there can be no objective standards of conduct, no moral norms. The issue [concerns] ... the very possibility that any uniform norms of conduct at all can be cut from the fickle fabric of feeling. A sentiment-based ethic seems to collapse into the most decadent emotivism and the rankest relativism’.⁷⁸ But, Callicott argues, such is not the case. It is the universality of the sentiments, the ‘consensus of feeling’, that provide the equivalent of objective moral standards.

Here Callicott brings in Darwin’s theory of the origin and evolution of ethics. ‘For Hume’, Callicott maintains, ‘the ‘universality’ of human moral dispositions was an ad hoc fact. Darwin completed Hume’s theory by explaining how such standardisation came about. Like the complex of normal human physical characteristics, normal human psychological characteristics, including the moral sentiments, were fixed by natural (and perhaps by sexual) selection’.⁷⁹ That is, Callicott explains, the ‘social sentiments’ were naturally selected for because they enhanced the inclusive fitness of the individual and the group. Individuals depended on each other for survival and well being, and the larger and more internally peaceable the group – i.e., the more developed the social sentiments – the greater its chances of surviving and prospering. ‘Now, to be sure’, Callicott writes, ‘inherited social feelings and moral sentiments may vary from person to person. But they vary within a range of normalcy, not unlike physical characteristics. ... Thus, upon Darwin’s account, we can explain how ethical dispositions vary, as obviously they do, while insisting that neither are they radically relative’.⁸⁰ So a sentiment-based ethic finds a normative dimension in a ‘consensus of feeling’. Callicott argues again and again that emotions or the sentiments are the ‘ground’ or ‘foundation’ of ethics.⁸¹ What does it mean for something to be the ground or foundation of ethics? Presumably, it refers to that which makes a moral claim valid. On Callicott’s ethic, what makes a moral claim valid, ‘the final court of appeal of moral judgments’,⁸² is a ‘consensus of feeling’ and that consensus is the result of evolution or natural selection.

The ‘normative dimension’ of the moral sentiments is, as Callicott acknowledges, like the normativity of medicine or physiology. In moral theory,

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this seems to leave us with an unacceptable biological determinism because it leaves no room for moral praise or blame. Indeed, Callicott's critics have powerfully advanced the argument that Callicott's ethic lacks 'normative force' in this sense.⁸³ Callicott nicely summarises the point of these critiques: '[T]he theory provides us no means of criticising the medical-like descriptive norms derived from common innate moral sentiments. There may be a consensus of feeling that murder is evil, but there also seems to be a consensus of feeling that only people are worthy of moral considerability. ... If the final court of appeal of moral judgments is a consensus of feeling, how can we possibly argue that although something is generally felt to be right or good, say speciesism, it *ought* not to be?'⁸⁴

Before looking at Callicott's attempted resolution to this problem of the normative force of his ethic, it is important to examine one avenue that he explicitly rejects. Callicott rejects what he calls 'a particularly strong sense of 'normative force' ... [which holds] that a proper ethic should *rationaly coerce* a moral agent into doing something or into leaving something undone, irrespective of her feelings'.⁸⁵ Normative force, in this sense, means logically compel on the pain of self-contradiction.⁸⁶ Callicott argues that it was Immanuel Kant who made this understanding of normative force 'the very measure of the moral quality of an action'.⁸⁷ He proceeds summarily to dismiss this understanding: 'Upon this interpretation of 'normative force', to charge that the Leopold land ethic lacks normative force reduces to the charge that it is not Kantian. And the appropriate reply to that charge is, 'So what?' The Leopold land ethic also lacks 'non-natural properties', thus it is not Moorean. It lacks a 'veil of ignorance', thus it is not Rawlsian. ... To insist that any ethic, environmental or otherwise, must answer to one moral philosopher's criterion for ethics is surely the most patent sort of question-begging'.⁸⁸

Several comments are in order. First, Callicott's position *demand*s that he reject this understanding of normative force. To adopt it would be to ground ethics in the reason (either reason itself or some reality that reason can discern) rather than empirical sentiments, and so to jettison the entire edifice he has so carefully built through the years on the basis of Hume's theory of the moral sentiments. That is, if this understanding of strong normative force is correct, then reason, not the sentiments, is the final court of appeal. Second, one might agree with Kant that this meaning of normative force is the only appropriate one for an ethical theory, without sharing Kant's view that feelings or sentiments are irrelevant to the moral life. Indeed, it seems to me that any metaphysical understanding of the good both adheres to this understanding of normative force and has a central place for feelings insofar

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as the good must be desired to be pursued. And this brings me to the third and final comment: The reason this is the *only* appropriate understanding of normative force in moral theory is not because it is Kantian, but because Kant argues convincingly that *only* on this understanding can an ethic avoid an untenable relativism. The moral law must bind the will unconditionally. If this is correct, then Callicott's rejection of this understanding of normative force is quite beside the point, and is itself question-begging, because failure to adhere to this understanding means that the resulting ethic must finally be relativistic. And, indeed, such is the case with Callicott's ethic. In order to demonstrate this point let us turn back to Callicott's response to the charge that his ethic lacks normative force.

Callicott responds that the moral sentiments are not themselves the whole of ethics. Indeed, 'the moral sentiments are in themselves underdetermined and plastic'.⁸⁹ So while '[e]thics is grounded in naturally selected feelings, ... there is also a large cultural component of morality that gives shape and direction to our selfless sentiments. In general, we may say, culture informs the moral sentiments'.⁹⁰ All normal human beings have the moral sentiments, but 'to whom they pertain and just how they ought to be behaviourally expressed is shaped by our cultural environment. ... We may indeed feel a special regard for our relatives and our fellows, but which beings are *believed* to be included in these classes is determined by cultural representation, not biology'.⁹¹

At this point, the urge to charge this ethic with 'a normatively deficient cultural relativism'⁹² is almost irresistible. After all, if it is cultural representations, which vary from culture to culture, that *determine* the proper objects of the moral sentiments, then it seems that what is moral in one culture may be immoral in another culture, which objects count as being worthy of moral consideration (or as having intrinsic worth) in one culture may differ from which objects count as being worthy of moral consideration (or as having intrinsic worth) in another culture. With a value theory in which inherent worth is conferred by human sentiments and the proper objects of these sentiments is fixed by⁹³ cultural representations, Callicott is apparently in the strange position of advocating an ethic that holds the following: which objects have inherent worth varies with the culture under discussion. So in one culture, only the members of one's clan may have inherent value; in another, all human beings, but no nonhuman entities, may have inherent value; in another, all living creatures may have inherent value. And so on. Clearly, such a view renders an ethic impotent (especially in the face of global environmental problems) since it endorses the view that mutually incompatible moral schemata are legitimate.

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Further, such relativism suffers from self-referential problems insofar as it explicitly denies but implicitly affirms a universal moral law. The cultural relativist affirms the following claim: all moral norms are completely culturally bound. If the moral law is understood to be the norm according to which all other norms are evaluated, then this affirmation is itself the moral law and is not itself wholly culturally bound. On the contrary, it is the norm by which *all* other norms are to be assessed. So the cultural relativist explicitly denies that there is a universal moral law while implicitly affirming such a law – rendering the position self-referentially incoherent.

But, Callicott insists, such relativism is emphatically not his position. ‘A culture’, he states, ‘is, among other things, a shared worldview. A culture’s values and ethical ideals rest upon and are justified by suppositions of fact and supposed relations among supposed facts. ... We condemn racism and attempt to purge it from our own culture – or from any other for that matter – principally by debunking the alleged ‘facts’ on which it is based and by which it is justified’.⁹⁴ Callicott holds that ‘a culture’s value and ethical ideals’ rest upon and are justified in accord with reason or ‘by suppositions of fact and supposed relations among facts’. And he here appeals to a universalistic understanding of reason. That is, since ‘facts’ can be ‘debunked’ across cultures there must be standards of assessment for what counts as successfully ‘debunking’ – standards that transcend any and so every culture.

Let us examine these claims. If values can be justified by facts, and these facts can be known in accord with universal standards of reason, then we have a universal standard of values. Since the debunking of relevant facts occurs across cultures or transcends the worldview of any given culture, the values justified by facts that cannot be debunked are likewise universal. But the very notion that there are universal values justified by reason presupposes that there are transcendental standards of assessment, or standards of assessment that are binding on all rational agents.

As Callicott puts it in relation to Leopold’s land ethic: ‘while human nature changes very slowly, our *ideas* about who we are, what sort of world we live in, and our relationship the natural environment change rapidly and not at all arbitrarily or blindly. They change in response to scientific discovery and to intra– and intercultural critical reflection and debate’.⁹⁵ So if these ideas change in accord with rational discussion across cultures rather than arbitrarily or blindly, then, to restate the point, there must be principles in accord with which argument across cultures can be assessed.

If these standards of assessment are themselves determined in the debate between differing worldviews, then in accord with what standards are *these* standards assessed? If there are not transcendental standards of assessment,

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then the standards are either culturally relative or, what is finally to say the same thing, chosen arbitrarily. Note that the standards of assessment cannot themselves be determined in debate between cultures because that would leave us with an infinite regress of standards (in accord with what standard should the standards of assessment be assessed and in accord with what standard should the standards which assess these standards of assessment be assessed and so on) or with the arbitrary choice of some standard.

Callicott's dilemma is the following: (1) if he states that values are fixed by evolution, then he can claim the 'equivalent of objective moral standards', but at the cost of making these standards immune to rational criticism, and (2) if he states that values are justified by reason, then he can claim that his ethic is not rationally arbitrary and has normative force, but at the cost of jettisoning his empirical sentiment-based ethic. Callicott wants it both ways. He wants an ethic grounded in empirical sentiments and values justified by reason. But his covert appeal to a universalistic understanding of reason undermines his empirical sentiment-based ethic.

Callicott asks: 'Has [Leopold's] land ethic, *grounded in the moral sentiments*, any normative force, any normative dimension? Its normative force is not the Modernist rationally coercive kind. But the land ethic certainly has a normative dimension. And *that normative dimension lies precisely in the realm of reason or cognition*'.⁹⁶ This makes it clear that, indeed, Callicott wants to have it both ways. On the one hand, he maintains that moral judgment is grounded in empirical sentiments; it is these sentiments that are the final court of appeal. On the other hand, he argues that the normative dimension of ethics lies in the realm of reason; it is reason that is the final court of appeal. Callicott attempts to escape the relativistic conclusion of his ethical theory by a covert appeal to the transcendental norms of reason. With this appeal, the grounding of his ethic in empirical sentiments is undermined. It is reason that, as Callicott says, grounds the normative dimension of ethics. And that he must appeal to the transcendental norms of reason is clear from his discussion of the capacity of reason to transcend cultural boundaries.

Once it becomes clear that Callicott undermines his own 'grounding' of ethics in the moral sentiments, we have no good reason to hold, with Callicott, that intrinsic value of nonhuman creatures is conferred by human consciousness. Callicott's mistake, I think, is the belief that the following two statements are equivalent: 'there is no value without a valuer' and 'there is no value without a *conscious* valuer'. Once valuing becomes the domain of conscious creatures, so that only such can be the source of value, then, if there is no value without a valuer, one must resort to a theory in which human beings project or confer value on such creatures.

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CONCLUSION

Analysing the locus of the failure of the value theories of Rolston and Callicott provides some insight into the shape of a viable value theory. Rolston's value theory fails because he bifurcates creation into subjects and objects. Once this bifurcation is made, there is no reason to conclude, on his grounds, that the value of objects has any moral relevance for human beings. Callicott's value theory fails because he insists that any intrinsic value in the world find its source in the empirical moral sentiments of human beings. Once a moral theory is built upon these empirical grounds, there is no escape from an untenable relativism. A viable value theory, then, might take the form of a *metaphysical* scheme (rather than an empirical account) in which *all* creatures are understood to be subjects (rather than bifurcating creation into subjects and objects). And it is such value theory, built upon neo-classical metaphysics, which is espoused here. This value theory not only avoids the problems that plague Rolston's and Callicott's theories, it also incorporates their best insights. With Callicott, such a theory holds that there can be no value without a subject capable of valuing; it is a subjective value theory in the sense that value depends upon subjectivity. With Rolston, such a theory holds that intrinsic value characterises all levels of reality and does not depend upon human valuation; it is an objective value theory in the sense that value is independent of *human* subjectivity.

NOTES

¹ Though the framing, focus and context differ, the content of this article has some overlap with chapter 6 of Benzoni's *Ecological Ethics and the Human Soul* (2007).

² See Rolston 1982; Rolston 1994, p. 177.

³ I am not here addressing Callicott's 'Postmodern' axiology. I have done so elsewhere. See Benzoni 2006.

⁴ Of course, Rolston makes the further claim that value is not only independent of human subjectivity but may be independent of any subjectivity. In this paper, I reject that particular understanding of 'objectivity'. Indeed, I argue that it is precisely Rolston's understanding of objectivity that causes difficulty for his axiology.

⁵ Whitehead 1978, p. 155.

⁶ It is true individuals, or metaphysically ultimate entities (entities that take in and response to their environment in a unitary fashion), under discussion, and not aggregates such as rocks or oceans.

⁷ Whitehead 1978, p. 90.

⁸ Ibid.

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⁹ Ibid., p. 98.

¹⁰ Ibid.

¹¹ Although I do not offer an extended defence of these theses here, I recognise that, in the end, such a defence is necessary to philosophically sustain these claims. In my judgment, that defence has been adequately undertaken elsewhere. For instance, in chapter 5 in Benzoni 2007, I offer such a defence. Further, the work of Alfred North Whitehead is especially important in articulating the philosophical grounding for these claims. See Whitehead 1967; 1968; and 1978. See also Hartshorne 1962; 1967, 1970; and 1971; Griffin 1998 is also helpful on the direct topic of interest in this paper – the subjectivity that characterises all levels of reality.

¹² Hartshorne 1970, chapter 8.

¹³ Ibid., p. 162.

¹⁴ Ibid., pp. 20-21.

¹⁵ See, e.g., McDaniel 1983.

¹⁶ Begley 2004; Murali 2005; Wang and Regalado 2006; Weiss 2003.

¹⁷ Maugh 2006; Pincock 2006; Sayre 2006.

¹⁸ Goldberg 2005; Vedantam 2003; Yoon 2003.

¹⁹ Griffin 1998, p. 176.

²⁰ Note that I have found it useful in my conversation with Rolston to distinguish between 'intrinsic value', or 'the goodness of a thing for its own sake', and 'moral worth', or 'being worthy of moral respect or being morally considered by human beings'. This distinction is useful precisely because Rolston's view makes the link between them tenuous.

²¹ See, e.g., Rolston 1988, p. 223.

²² Ibid., p. 176.

²³ Ibid., p. 177.

²⁴ Rolston 1994, p. 182, italics added

²⁵ Ibid., p. 183, italics added. See also Rolston 1988, p. 223 for an explicit reference to the intrinsic value of non-biotic things

²⁶ Rolston 1994, p. 194.

²⁷ Rolston 1988, p. 107.

²⁸ Rolston 1982, p. 146.

²⁹ Rolston 1988, p. 114.

³⁰ Ibid., p. 116.

³¹ Ibid., pp. 96-97.

³² Ibid., p. 110.

³³ Ibid., p. 27. Since the examples seem to concern strictly instrumental value, they do not seem helpful in establishing the existence of unexperienced intrinsic value. Moreover, the values mentioned must be experienced in some sense if they are to be valuable.

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- ³⁴ Ibid., p. 111.
- ³⁵ Rolston 1994, pp. 171-172. See also p. 177.
- ³⁶ Ibid., p. 172.
- ³⁷ Ibid., p. 173. Italics added.
- ³⁸ Rolston 1988, p. 96, italics added.
- ³⁹ Ibid., p. 174.
- ⁴⁰ Rolston 1982, p. 146.
- ⁴¹ Rolston 1988, p. 109.
- ⁴² Callicott 1992, pp. 228-229.
- ⁴³ Ibid., p. 229.
- ⁴⁴ Ibid., p. 230.
- ⁴⁵ See, e.g., Rolston 1988, p. 109.
- ⁴⁶ Aquinas 1981, Ia, 5, 3.
- ⁴⁷ Aquinas 1934, IIIb, 112.
- ⁴⁸ See, e.g., Aquinas 1981, 64, 1; 96, 1; and Aquinas 1934, IIIb, 112.
- ⁴⁹ Rolston 1988, p. 96, italics added.
- ⁵⁰ See, e.g., *ibid.*, pp. 107-108; and Rolston 1994, p. 194.
- ⁵¹ Consideration of Thomas's conception of reality exposes this hidden premise of the dominant paradigm.
- ⁵² Ernest Partridge 1986, p. 103, citing Feinberg 1974, p. 52. As noted in the text, the position developed in this paper does not endorse the notion that subjectivity requires 'rudimentary cognitive equipment', but merely the notion that, as Hartshorne puts it, the 'germ of mind' – which requires no such equipment since it need not be conscious or even sensuous – characterises entities at all levels of reality. See Hartshorne 1970, chapter 2.
- ⁵³ As noted, I have examined Callicott's attempt to develop the outlines of a 'post-modern' axiology elsewhere. See Benzoni 2006.
- ⁵⁴ Callicott 1980.
- ⁵⁵ Callicott 1999, p. 132.
- ⁵⁶ *Ibid.*
- ⁵⁷ *Ibid.*, pp. 132-133.
- ⁵⁸ *Ibid.*, p. 136.
- ⁵⁹ *Ibid.*, p. 138.
- ⁶⁰ For critical commentary, see Lo 2001(a); 2001(b).
- ⁶¹ Callicott 1989, p. 161.
- ⁶² Callicott 1996, p. 219. One might note that, in fact, there has been considerable slippage from the first to the second statement. After all, the first statement might be interpreted to mean that if something is a valuer, then it has value. Callicott interprets it to mean, in the second statement, that if something has value, then it

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is valued by a valuer.

⁶³ Callicott 1999, p. 15.

⁶⁴ My point in adding the qualifiers ‘empirical’ and ‘emergent’ is to emphasise the contingent nature of these feelings. They could, conceivably, have been different, even if, in fact, they happen to be quite wide spread in the population.

⁶⁵ Callicott 1989, p. 147.

⁶⁶ Ibid., p. 133.

⁶⁷ Callicott 1996, p. 219.

⁶⁸ Ibid.

⁶⁹ Callicott 1999, p. 224.

⁷⁰ Ibid.

⁷¹ Ibid., first italics added.

⁷² See also *ibid.*, p. 177.

⁷³ See, e.g., *ibid.*, p. 69.

⁷⁴ See, e.g. Callicott 1999: 171-183; or Callicott 1989: 129-155. For a thoughtful critique of this reading of Hume, see Lo 2001(a); 2001(b).

⁷⁵ Callicott 1999, p. 99, italics added.

⁷⁶ Ibid., italics added.

⁷⁷ Ibid.

⁷⁸ Ibid., p. 106.

⁷⁹ Callicott 1989, p. 153; see also p. 150.

⁸⁰ Callicott 1999, p. 108.

⁸¹ See, e.g., *ibid.*, p. 111, 183.

⁸² Ibid., p. 109.

⁸³ See, e.g., Kristin Shrader-Frechette 1990; 1996.

⁸⁴ Callicott 1999, p. 109.

⁸⁵ Ibid., p. 101.

⁸⁶ See, e.g., *ibid.*, p. 105.

⁸⁷ Ibid., p. 102.

⁸⁸ Ibid., pp. 102-103.

⁸⁹ Ibid., p. 112.

⁹⁰ Ibid., p. 111.

⁹¹ Ibid., pp. 111–112. This view claims to ground ethics in the sentiments, while simultaneously seemingly making the sentiments slaves to cultural representations.

⁹² Ibid., p. 113.

⁹³ The following comment on Leopold’s position, which is shared by Callicott, indicates the propriety of using the term ‘fixed by’: ‘A land ethic ... is not only ‘an ecological necessity’, but an ‘evolutionary possibility’ because a moral response to the natural environment – Darwin’s social sympathies, sentiments, and instincts

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translated and codified into a body of principles and precepts – would be automatically triggered in human beings by ecology's social representation of nature. ... Therefore, the key to the emergence of a land ethic is, simply, universal ecological literacy'. Callicott 1989, p. 82, italics added; see also pp. 81-82.

⁹⁴ Callicott 1999, p. 113.

⁹⁵ Ibid., p. 114.

⁹⁶ Ibid., italics added.

REFERENCES

- Aquinas, Thomas. 1934. *Summa Contra Gentiles*, trans. English Dominicans. London: Burns, Oates, and Washbourne.
- Aquinas, Thomas. 1981. *Summa Theologiae*, trans. English Dominicans. New York: Christian Classics.
- Benzoni, Francisco. 2006. 'Creatures as creative: Callicott and Whitehead on creaturely value'. *Environmental Ethics* **28**: 37–56.
- Benzoni, Francisco. 2007. *Ecological Ethics and the Human Soul: Aquinas, Whitehead, and Metaphysics of Value*. Notre Dame, IN: University of Notre Dame Press.
- Begley, S. 2004. 'Prosthetics operated by brain activity move a step closer to reality'. *Wall Street Journal*, July 9: B1.
- Callicott, J. Baird. 1980. 'Animal liberation: A triangular affair'. *Environmental Ethics* **2**: 311–328.
- Callicott, J. Baird. 1989. *In Defense of the Land Ethic: Essays in Environmental Philosophy*. Albany, NY: State University of New York Press.
- Callicott, J. Baird. 1992. 'Rolston on intrinsic value: A deconstruction'. *Environmental Ethics* **14**: 129–143.
- Callicott, J. Baird. 1996. 'On Norton and the failure of monistic inherentism'. *Environmental Ethics* **18**: 219–221.
- Callicott, J. Baird. 1999. *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany, NY: State University of New York Press.
- Feinberg, Joel. 1974. 'The rights of animals and unborn generations', in William Blackstone (ed.), *Philosophy and Environmental Crisis* (Athens, GA.: Georgia University Press).
- Goldberg, C. 2005. 'Among orangutans: Red apes and the rise of human culture'. *Science News*, **167**(6): 95.
- Griffin, David Ray. 1998. *Unsnarling the World-Knot: Consciousness, Freedom, and the Mind-Body Problem*. Berkeley and Los Angeles: University of California Press.
- Hartshorne, Charles. 1962. *The Logic of Perfection and Other Essays in Neoclassical Metaphysics*. LaSalle, IL: Open Court Publishing Co.
- Hartshorne, Charles. 1967. *A Natural Theology for Our Time*. LaSalle, IL: Open Court Publishing Co.

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- Hartshorne, Charles. 1970. *Creative Synthesis and Philosophic Method*. LaSalle, IL: Open Court Publishing Co.
- Hartshorne, Charles. 1971. *Reality as Social Process*. New York: Hafner Publishing Company.
- Lo, Y.S. 2001(a). 'A Humean argument for the land ethic?' *Environmental Values* **10**: 523–539.
- Lo, Y.S. 2001(b). 'Non-Humean holism, un-Humean holism'. *Environmental Values* **10**: 113–123.
- Maugh, T.H. 2006. 'But do they all think they're fat? Like humans, elephants recognize their mirror image'. *Los Angeles Times*, October 31: A11.
- McDaniel, J. 1983. 'Physical matter as creative and sentient'. *Environmental Ethics* **5**: 291–317.
- Murali, D. 2005. 'A monkey moves a robot arm in MIT'. *Businessline*, May 23: 1.
- Partridge, Ernest. 1986. 'Values in nature: Is anybody there?' *Philosophical Inquiry* **8**: 96–110.
- Pincock, S. 2006. 'No Dumbo: A self-aware elephant makes the case that some species are smarter than we thought'. *Financial Times*, November 18: 13.
- Rolston, Holmes, III. 1982. 'Are values in nature subjective or objective?' *Environmental Ethics* **4**: 125–151.
- Rolston, Holmes, III. 1988. *Environmental Ethics: Duties to and Values in the Natural World*. Philadelphia, PA.: Temple University Press.
- Rolston, Holmes, III, 1994. *Conserving Natural Value*. New York: Columbia University Press.
- Sayre, C. 2006. 'Brainy beasts'. *Time* **168**(20): 22.
- Shrader-Frechette, Kristin. 1990. 'Biological holism and the evolution of ethics'. *Between the Species* **6**: 185–192.
- Shrader-Frechette, Kristin. 1996. 'Individualism, holism, and environmental ethics'. *Ethics and the Environment* **1**: 55–69.
- Vedantam, S. 2003. 'From orangutans, a cultural display: Ape joins list of species that can learn behaviors by social contact'. *The Washington Post*, January 3: A03.
- Wang, S., & Regalado, A. 2006. 'Harnessing thought to help the injured'. *Wall Street Journal*, July 13: B1.
- Weiss, R. 2003. 'Monkeys control robotic arm with brain implants'. *The Washington Post*, October 31: A01.
- Whitehead, Alfred North. 1967. *Adventures of Ideas*. New York: The Free Press.
- Whitehead, Alfred North. 1968. *Modes of Thought*. New York: The Free Press.
- Whitehead, Alfred North. 1978. *Process and Reality: An Essay in Cosmology*, corrected edition, ed. David Ray Griffin and Donald W. Sherburne. New York: The Free Press.
- Yoon, C.K. 2003. 'Scientists say orangutans can exhibit "culture"'. *New York Times*, January 3: 16.