Nature, Value, Duty

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NATURE, VALUE, DUTY
LIFE ON EARTH WITH HOLMES ROLSTON, III

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WAYNE OUDERKIRK AND
CHRISTOPHER J. PRESTON

INTRODUCTION

A PHILOSOPHER GONE WILD: HOLMES ROLSTON, III, AND ENVIRONMENTAL PHILOSOPHY

The field of environmental ethics would not be what it is today without the contribution and influence of Holmes Rolston, III. More than any other single figure Rolston has been central to its genesis and development over the last thirty years. Given the environmental problems the world faces and the reorientation within philosophical ethics towards applied ethics that was happening in the 1970s, it seems likely that environmental ethics would have eventually emerged without Rolston's contributions. But it would not have emerged with the same force or with the same emphases. Quite simply, he has put his stamp on the whole field as it has grown from its modest beginnings.

It is especially significant to emphasize that the groundbreaking work done by Rolston in this arena is not just about applying an ethical theory. It is about doing philosophy in the broadest possible sense. From his earliest writings, Rolston realized that offering ethical guidance about how we humans ought to interact with our environment would require something far beyond the mere application of ethical theories developed for inter-human ethics, the approach that remains paradigmatic in the fields of business and medical ethics. Thinking about human relationships with the nonhuman world quickly took him beyond the categories and concepts of traditional moral theory. The problems that environmental philosophy addresses are indeed often ethical, but complete answers to those problems also require revisiting some central metaphysical and epistemological categories, in order to situate the moral categories in relation to them. Although Rolston was not the only thinker to realize this, and not the only one to start breaking apart those traditional categories, he has always recognized, and forced others to recognize, that environmental ethics demands a significant re-orientation of philosophy.

After more than thirty years of significant contribution and influence, we think it is time to devote a whole volume to a contemporary consideration of Rolston's impact and his thought. Because he has published so prolifically in so many venues and with so many varying emphases, we knew it would be impossible to achieve a complete analysis of his work. In light of the fact that many of the discussions and evaluations of his work have been staples in the environmental philosophy literature for many years and are widely republished elsewhere, we decided to approach this review by collecting a set of contemporary reflections on Rolston's work. Some of the essays that follow are by relatively new contributors to the field; others are from established figures. But all of them are original to this collection, and all of them assay Rolston's work to some degree with an eye towards advancing the field, whether through friendly developments of his ideas or through vigorous intellectual disagreement with him.

ROLSTON'S BIOGRAPHY

Holmes Rolston, III, was born in 1932 in Staunton, Virginia. Both his father and his grandfather were Shenandoah Valley preachers. Rolston and his two sisters grew up in an environment typical of depression era rural Virginia. Water was drawn from a cistern, chickens scratched in the yard, and a large vegetable garden supplied the family with a sizeable portion of their dietary needs. The young preacher's son rambled barefoot across the fields and forests of the lightly settled Shenandoah, fishing and bathing in the creeks, and watching with fascination as the water wheels on the nearby Maury River milled flour from local grain.

When Rolston enrolled at Davidson College in 1950, he was interested in understanding the physical world in its most fundamental dimensions. This meant studying physics, astronomy, and mathematics, all of which he did with talent and enthusiasm. In the immediate aftermath of World War II, the secrets of the atom appeared to hold the key to the world's future. Though he majored in physics and mathematics, Rolston could not help also finding himself drawn to the mysteries of biology. Biology spoke strongly to the immediate experiences of the natural world that he had grown up with in the Shenandoah Valley. A key moment in Rolston's college education came at the end of a spring break field trip to the Florida Everglades when his biology instructor brought back an insect that later turned out to be a species new to science. As Rolston gazed down the microscope at the new creature, he gained a vivid and lasting sense of the drama that biology could reveal.

Despite this burgeoning interest in biology, Rolston's theological leanings now stepped in. Within a few years of leaving Davidson he had graduated from Union Theological Seminary in Richmond with a divinity degree. Now married to Jane Wilson, he swiftly completed a doctorate in theology at the University of Edinburgh in Scotland. On their return to the United States, Rolston and his wife moved back to their geographical roots when he became a Valley of Virginia pastor at the Walnut Grove and High Point Churches outside of Bristol, Virginia. It was during this time that Rolston's fascination with natural history started to become a vocation. Rolston's insatiable wonder at the complex ecology within which he lived drew him first to biology classes at nearby East Tennessee State University and eventually to leave his job as a preacher and enroll in a masters program in the philosophy of science at the University of Pittsburgh. Rolston graduated in only a year and then, with some sadness at leaving his native landscape, left Appalachia and headed west to teach philosophy at Colorado State University in Fort Collins, thinking that he might stay out west for just a couple of years. He has been there ever since, earning the accolade of being named University Distinguished Professor, a honor reserved for only twelve in a faculty of twelve hundred.

Even before he left Virginia to start his career as a philosopher, Rolston had begun to write philosophical essays about our place in the natural world for magazines such as *Virginia Wildlife* and *Main Currents in Modern Thought*.[1] Profound questions about earthly roots, belonging, and moral obligation were already surfacing in essays such as "Meditation at the Precambian Contact." Here Rolston states "[I]f I can

recollect my prenatal past, my gestation in the geological womb, my genealogy, then I shall know who I am and where I am."[2] Mystified by the idea of ethical "oughts" that bore no connection to geological and evolutionary roots, Rolston complained about a sheriff he encountered in the woods looking for moonshiners:

> [i]t was as though he pursued his moral question independently of his origins, as though there were now superimposed on the bedrock of Earth a novel, ethical traffic. He came and went preaching and enforcing his "Thou shalt not," as though his sermon and authority were derived elsewhere than from the dust of which he is composed.[3] (1986, 237).

He remained curious about the connection between the geological sciences and ethics, but by the time he moved to Colorado he had begun to sense that evolutionary theory and the biological sciences contained more promise for instructing us about our place in the world. In *The Pasqueflower*, an early essay that Rolston still ranks among the closest to his creed, his turn to biology for inspiration becomes clear. "We love the landscape, the sunset, the night sky," he affirms:

> [y]et greatly exceeding the geophysical, mineralogical, and celestial ranges of beauty are those of the emergent structures of life, particularly as these come to their botanical apogee in the flowers of the higher plants, which so marvelously combine function and beauty, as though to mark life's reproduction with a special sign.[4]

With the publication of "Is There an Ecological Ethic?" in the philosophy journal *Ethics*, in 1975, Rolston became known as one of a handful of philosophers shaping environmental ethics into a recognizable academic discipline. In 1979, together with Eugene Hargrove, Rolston became a founding editor of *Environmental Ethics*, which provided a forum for discussion of the philosophy of nature. In 1986, Rolston published a collection of his early thoughts on environmental philosophy in *Philosophy Gone Wild*. He quickly followed this collection with one of the first—and still one of the most influential—monographs in the field titled *Environmental Ethics: Duties to and Values in the Natural World* (Temple University Press, 1988). Rolston was fast becoming one of the most recognizable names in the rapidly growing field of environmental philosophy. In 1990 he was the founding president of the International Society for Environmental Ethics. After attending the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, Rolston published his most policy oriented work in environmental ethics, *Conserving Natural Value* (Columbia University Press, 1994). In 1997, Rolston was invited to give the prestigious Gifford Lectures in natural theology at Edinburgh University, immediately placing him alongside such historically influential thinkers as William James, Werner Heisenberg, Alfred North Whitehead, Karl Barth, Albert Schweitzer, and Iris Murdoch. The Templeton Prize

for discoveries in science and religion followed in 2003, cementing Rolston's place on the international stage.

ROLSTON'S ENVIRONMENTAL PHILOSOPHY

As this brief biography indicates, much of Rolston's work in environmental philosophy aims at a careful negotiation of a pathway that connects theology, science, and ethics. In some senses, Rolston's environmental philosophy *is* this pathway. The negotiation has been carried out largely through an articulation of the concept of objective intrinsic value in nature. Ethicists in the western tradition had previously assumed almost universally that certain aspects of our humanity make humans alone worthy of moral consideration. In contrast, nature is only judged important for its instrumental value to humans. For example, productive fisheries, clean water and air, wide open recreational spaces, and aesthetic vistas might all be considered to make a valuable contribution to the values present in human life and culture. But before the early nineteen seventies it was uncommon to think that nature itself might have intrinsic value, value that existed independently of human needs and interests. With the help of a cohort of other early environmental philosophers such as Arne Naess, Richard Routley, and Paul Taylor, Rolston began to articulate a coherent account of such value.

This central notion of his theory, the objective intrinsic value of nature, is perhaps the biggest challenge Rolston offers to traditional western philosophy. It demands a significant change in the value status of nonhuman entities—entities that previously were thought to have no value of their own at all—and it transforms human relations with those entities into matters for moral deliberation. Rolston's justification of such values brings these entities themselves—rather than only human concerns or interests—into the moral spotlight.

How does Rolston establish or justify this radical concept? Rolston leads us through the argument with some detailed observations in ecological and biological science. There we discover such features as respiration, photosynthesis, digestion, reproduction, symbiosis, predation, with individual organisms playing crucial roles in larger contexts, and with the larger contexts in turn significantly influencing their constituent members. At the level of the organism, the biological processes appear to center on the survival and reproduction of the individual. In that basic biological setting, Rolston finds a life being defended and thus valued by the individual that defends it. The biological facts reveal that the organism values its own survival even though it may not be conscious of its own valuing.

When Rolston considers further how a non-conscious organism can be said to value its own survival, he looks towards the informational features of the organism's genes. Each such genetic set, he claims, by carrying the information for the creation of individuals of that type, is at the same time a "normative set," containing the genetic directions for the achievement of that which the organism "ought to be." Rolston quickly moves from the level of the individual on to the level of the species by arguing that this genetic set is conserved primarily at the species level. He identifies a species as "a coherent ongoing form of life expressed in organisms, encoded in

gene flow, and shaped by the environment."[5] While admitting that the category of species is dynamic and evolutionary Rolston insists that species have enough identity to be objects of direct moral consideration in their own right.

At the ecosystem level, where geography and ecology interact to create beneficial conditions and resources for individuals and species, Rolston observes that such benefits are both instrumentally valuable to the individual organisms, and valuable in themselves as parts of a system that nurtures and furthers life. It is the system's generativity, its ability to create billions of diverse and complex life forms over evolutionary time that Rolston finds both impressive and morally considerable. He argues that this generativity demonstrates the value of the overall biosystem, but feels that the term "intrinsic value" is inadequate at this systems level. He therefore characterizes this biological generativity as "systemic value." With lyrical writing, word plays, and seductive argumentation, Rolston makes a comprehensive case that Earth as a whole is morally considerable and worthy of a certain type of treatment by humans. "[S]ystemic nature is valuable intrinsically, as a projective system" he insists, "for its capacity to throw forward (pro-ject) all the storied natural history . . ."[6] By the time he is finished with his argument, Rolston has found value throughout biological nature, from the smallest individual organism to the largest biotic whole.

The final major piece of Rolston's ethical view is the direct connection he sees between natural intrinsic value and moral obligations. He subtitles his systematic work *Duties to and Values in the Natural World*. Clearly he sees the value discovered in nonhuman nature as entailing human moral duties: "Whatever has such resident value lays a claim on those who have standing as moral agents when they encounter such autonomous value."[7]

Many readers find in Rolston's defense of natural intrinsic value a powerful and satisfying philosophical expression of their own evaluative responses to nature. But for many thinkers, including those sympathethic to his project, his theory raises numerous complex philosophical questions. In the essays collected in this volume, the authors discuss some of those questions in depth.

CRITICALLY ENGAGING ROLSTON'S PHILOSOPHY

The anthology begins with several papers that address Rolston's signature ethical theory. Katie McShane raises two central questions that challenge the heart of Rolston's account of intrinsic natural value. Focusing on an organism's achievement of its genetically directed functions, McShane asks why, in recognizing those processes, Rolston thinks it appropriate to use evaluative language in our descriptions of them.

McShane challenges Rolston's inference from the fact that organisms exhibit goal-directed behavior to the conclusion that the achievement of their goals generates value. She argues that this inference is in need of more argumentative support than Rolston has provided for it. Her second question is whether, even if Rolston is right to use evaluative language in such contexts, those specific kinds of values are capable of generating moral obligations towards the natural entities involved. She claims that Rolston has not adequately defended the claim that they are.

Keekok Lee's essay offers a plea for Rolston to go further. Although she believes Rolston's theory about intrinsic natural values is essentially correct, Lee argues that Rolston is not radical enough. She makes a case for expanding human moral concern from the biotic realm to the abiotic, including to planets where there is no life. To make the argument, Lee elaborates several additional categories for environmental philosophers, including "trajectory," "immanent teleology," and "independent value."

Another essential part of Rolston's theory of the intrinsic value of nonhuman nature is his insistence that such value is objectively present in nature. In fact, it is this insistence that makes his view so controversial. His position has in the past provoked complaints from philosophers such as J. Baird Callicott and Bryan Norton about whether such value could really be objective.[8] Recent developments in epistemology challenge humans' ability to know objective features of the world as they are in themselves, without a strong element of human "construction." This challenge to the objectivity of knowledge applies especially strongly to the concept of objectively existing value because values have traditionally been viewed as unquestionably dependent upon human conscious experiences. In his essay, Christopher Preston presents and evaluates Rolston's responses to this kind of "postmodern" critique. Arguing that, ultimately, Rolston's responses are unsatisfactory, Preston offers an alternative way of viewing natural value, based on some recent proposals about the metaphysical status of unobservable entities found in philosophy of science.

Mark Wynn offers a generally sympathetic elaboration of Rolston's ideas in his contribution. Rolston is sometimes criticized for the strongly rationalistic approach he takes to his project; Wynn's essay counters that criticism. Wynn points out that Rolston's arguments also include discussion of the emotions. Moving from the few but favorable explicit uses of emotions in Rolston's works, Wynn uses some recent theories of the emotions to claim first, that Rolston's writings are compatible with those theories and second, that additional emphasis on the emotions, understood in light of those theories, strengthens Rolston's arguments for intrinsic natural value. In the final section of his essay, Wynn connects Rolston's ideas about the character of natural values with some theological reflections, deliberately imitating Rolston's own concerns with situating his theories within a theological context.

While it is possible to read a good deal of Rolston's work in environmental ethics without encountering any mention of a Christian God, a wider search reveals that Rolston carefully integrates his philosophical ethic with a well developed theology of nature. An important question immediately arises about the degree to which Rolston's environmental ethic is ultimately a religious ethic. Many philosophers, suspicious of religious motivations for belief, would lose enthusiasm for Rolston's position if it did not work without the addition of a divine being. For Ned Hettinger, the whole merit of the ethic hinges on exactly how Rolston articulates the connection between the deity and the intrinsic values found in nature. Hettinger is not too concerned about there being *some* religious dimension to our relationship with nature. The environmental movement often cites approvingly individuals and even whole cultures in which the appropriate attitude to nature is one of reverence. But Hettinger

worries that as God's role in grounding intrinsic value increases, the ethic becomes less of a truly environmental ethic and more of an opportunity to reverence the deity.

While it is one thing to find positive moral value in nature, both philosophers and theologians have also recognized how important it is to account for so-called "disvalues" in nature. Even a casual look at the biological world reveals that it is full of suffering, waste, and death. The problem of disvalues in nature mirrors the traditional problem for theists of how to account for the presence of evil in the world. Theodicy, the task of reconciling apparent evils such as predation, suffering, death, parasitism, indifference, waste, and struggle with a benevolent deity, has long been crucial to natural theology. In her contribution, Lisa Sideris discusses Rolston's theodicy in depth. She traces the path Charles Darwin traveled as he found himself reluctantly converting to atheism, and she illustrates how Rolston manages to steer a different course. Sideris suggests that Rolston's gift to both Darwinians and Christians is his refusal to censure either nature or God in the light of apparent evil in nature. She explores Rolston's explanation that death and disease are essential to an evolutionary process that is lured in the direction of ever greater value. She notes how Rolston insists that suffering plays a critical role in both Christianity and in Darwinism.

Another aspect of Rolston's position that attracts considerable attention is his articulation of the aesthetic value of nature. In 1949 Aldo Leopold coined what has become one of the most recognizable phrases in environmental philosophy: "A thing is right when it tends to promote the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[9] In stating things this way, Leopold unwittingly illustrated just how closely connected are aesthetic values and moral values. The question of exactly how close is this link between aesthetic and moral values is a question Rolston's own account raises and one that has been a considerable bone of contention in environmental philosophy. Generally speaking, Rolston follows a fairly traditional approach in that he finds aesthetic value to be a different kind of value from morally considerable intrinsic value. The former, he thinks, depends upon an observer—probably human—to ignite it while the latter is objectively present in nature independent of any observer.

Both Eugene Hargrove and Allen Carlson explore Rolston's position on the relationship between ethics and aesthetics. Carlson points out that even when aesthetics is not the explicit focus of a particular passage of Rolston's writing, he often refers to and relies on aesthetic notions. For example, when Rolston uses ecological science to find objective intrinsic value in nature it is often the "order," "harmony," "stability," or "unity" of a system that forms the basis of the value. Carlson points out that these common terms taken from ecological science are at least in part aesthetic terms.

As he reads Rolston between the lines, Carlson pinpoints in Rolston's articulation the idea that ecological science is being used both to re-describe and to re-illuminate a scene so that values that did not appear to be present before now become visible. Rolston says that an apparently ugly scene such as maggots feeding on a rotting elk carcass or blackened stumps after a forest fire need to be reconsidered as parts of

ongoing historical and ecological processes. Not only are the long range ecological processes valuable but the rotting carcass and the burned forest, seen now as essential parts of those processes, are also deemed to have aesthetic value. Carlson shows how this view about science directly illuminating ecological features of a particular scene makes possible a positive aesthetics, the view held by John Muir that everything in nature—from raging rivers to rotting elk carcasses—has at least some degree of positive aesthetic value.

Eugene Hargrove questions the asymmetry that Rolston wants to maintain between aesthetic and moral values. In his own work Hargrove seeks to ground the environmental movement firmly within the aesthetic tradition. Hargrove is no enthusiast for the idea that values exist objectively in nature; but he does think that aesthetic sensibilities can provide a secure and reliable, even objective, foundation for environmentalism. Hargrove notes that once Rolston has denied the objectivity of aesthetic values, his signature commitment to the objectivity of moral values depends entirely upon establishing an asymmetry between aesthetics and ethics. If Rolston fails to maintain the asymmetry then his signature claim is seriously undermined. Hargrove explains carefully with numerous textual examples why he thinks Rolston fails in these efforts.

Brenda Hausauer's contribution to the volume discusses for the first time Rolston's distinctive literary style. Rolston is rare in the philosophical world for blending analytic argument with literary flourishes and word plays. Hausauer compares some of the rhetorical devices Rolston uses to similar devices used by Annie Dillard in *Pilgrim at Tinker Creek*. Despite the surface similarities, Rolston and Dillard are writing for radically different audiences. Hausauer finds herself compelled to ask whether Rolston's style detracts from the philosophical content of his work or whether it is an effective vehicle to convey the same sentiments that nature writers such as Dillard are more free to employ.

Although he has worked extensively on developing and defending his theoretical account of natural intrinsic value, Rolston has always had in mind its implications for specific, concrete human interactions with nature. Indeed, we test moral theories not only through the analysis of their constituent arguments and their coherence but also through their general workability in real-life situations. No such theory can give an exhaustive account of our duties because the questions of what we ought to do arise in the context of an infinite number of actual situations of choice and action. But each theory does have implications for how we should choose, and Rolston's is no exception. Clearly, his theory admonishes us to respect the intrinsic value of nature, and in books like *Conserving Natural Value*, Rolston provides numerous concrete examples of how we are obliged to act.

Several contributors to this volume examine the practical implications of Rolston's ideas. Victoria Davion evaluates some of the implications of his theory from an ecofeminist perspective. The results are mixed. She claims that Rolston's discussions of the treatment of domestic animals, especially food animals, and of hunting are problematic when evaluated through ecofeminist lenses. In the case of food animals, she uses an ecofeminist critique of dualistic thinking to argue that

Rolston's position mistakenly relies on an unjustified dualism that permits cruel treatment of the animals in such practices as factory farming. In the case of hunting, she finds Rolston's partial defense to be based too uncritically on an essentialized and gendered concept of violent behavior. Despite these objections, Davion finds Rolston's evaluation of the dilemma of when to feed the poor and when to protect the environment to be largely consistent with an ecofeminist evaluation. She also argues that his rejection of the sociobiological analysis of altruistic behavior mirrors ecofeminist sensibilities.

In the past, there have been many disagreements between philosophers concerned about ecological systems and philosophers concerned about the wellbeing of individual nonhuman animals. Clare Palmer's essay focuses directly on the application of Rolston's theory to the treatment of animals, and one of her aims is to show that these two schools of thought need not be at odds. Although she finds Rolston's own statement of his view regarding the treatment of animals "problematic in some respects," she believes that his theory "provides tools for thinking through the complicated location of domesticated animals both conceptually and ethically." A significant and useful part of her discussion is her identification of several overlapping but differing senses of "nature" and "natural" in Rolston's work.

Rolston has high regard for the value of wild areas. These areas contain little human influence and as such contain all the levels of biological value that Rolston finds in historical nature. Consistent with his overall theoretical position, the guidance he offers regarding our treatment of such areas has primarily been to allow the wild creatures and processes in them to proceed without human interference. John Lemons, an ecologist and environmental professional, questions the adequacy of that advice and, by implication, the helpfulness of the theory. Focusing on the U.S. National Parks, Lemons claims that many of Rolston's case studies omit the huge complexities facing park administrators and managers. Thus, even if those professionals want to make use of environmental ethics in their decisions, Rolston has not provided a theory that gives clear guidance for situations in which letting nature take its course is not an option. Despite this weakness, Lemons argues that Rolston's promotion of the intrinsic value of nature is a valuable perspective that can help motivate ethical reflection on decisions regarding wilderness in national parks.

Rolston's fondness for wild areas is the source of the criticism leveled by Jim Sheppard and Andrew Light. Sheppard and Light complain that Rolston takes an unnecessarily negative view of urban environments. They argue that Rolston's work has been fairly typical of New World environmental ethics in its prejudice against anthropocentric forms of value. They suggest that his anti-urban geographical bias is at best unargued and at worst misanthropic. While lamenting this aspect of his work, Sheppard and Light see possibilities within Rolston's ethic for remedy. They highlight the presence of some often ignored spontaneous natural values in urban environments, investigating urban soil, water, and geological formations for their natural values. In addition to these sources of spontaneous natural values, they find in cities evidence of numerous other values that Rolston

champions, including systemic natural values and mixes of natural and cultural values. While acknowledging that Rolston will probably never come to embrace the urban environment in the way they would like him to, Shepard and Light attempt to show that Rolston's position need not be so exclusive of the urban environment as it currently appears.

ROLSTON REPLIES

At the end of the volume Rolston himself provides a commentary on each of the preceding papers. He engages each of the authors dialogically in order to advance the conversation he helped begin over three decades ago. At times he acknowledges the sting of some of their criticisms; at other times he shows that he and his critics agree; at still other times he argues that his critics have misread him or are simply mistaken. But at all times in his response, he affirms an ethic that he has maintained with few modifications over a lifetime of reflection on natural science, philosophy, and religion.

Following the reply essay, we have included an abbreviated bibliography of Rolston's major works organized by topic area for readers that wish to delve further into Rolston's writing.

NOTES

[1] A number of these early essays are reprinted in the closing section of Rolston (1986).
[2] Rolston (1986), 233.
[3] Ibid, 237.
[4] Ibid, 257.
[5] Rolston (1988), 136.
[6] Ibid., 198.
[7] Ibid, 86.
[8] Norton, "Epistemology and Environmental Values" *Monist* (1992): 208–226. J. Baird Callicott, "Intrinsic Values, Quantum Theory, and Environmental Ethics," *Environmental Ethics* 7 (1985): 357–375 and "Rolston on Intrinsic Value: A Deconstruction" *Environmental Ethics* 14 (1992): 129–143.
[9] Leopold (1949), 224–225.

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1. ROLSTON'S THEORY OF VALUE

ROLSTON'S VIEW

Holmes Rolston, III was one of the first philosophers to take on the task of constructing a theory of value adequate to environmental ethics. He proposes a theory of value according to which, he explains, "value is not anthropogenic, it is biogenic."[1] His view of value is one on which value judgments can be justified independently of appeals to human interests or preferences, and on which nature—including organisms, ecosystems, and non-living things—can and does possess value in its own right.

As Rolston describes it, his theory of value is "objective" rather than "subjective," which for him means that it locates value in mind-independent parts of the world rather than in mind-dependent appearances, sensations, attitudes, etc.[2] He begins his account of what this objective value is and where it comes from by describing living organisms in quasi-Aristotelian teleological terms:

> Something more than causes, if less than sentience, is operating within every organism. There is information superintending the causes; without it the organism would collapse into a sand heap. This information is a modern equivalent of what Aristotle called formal and final causes; it gives the organism a telos, "end," a kind of (nonfelt) purpose. Organisms have ends, although not always ends-in-view. All this cargo is carried by the DNA. . . .
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> . . .
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> [T]he genetic set is a normative set; it distinguishes between what is and what ought to be. This does not mean that the organism is a moral system, for there are no moral agents in nature apart from persons, but that the organism is an axiological system, an evaluative system. So it grows, reproduces, repairs its wounds, and resists death. We can say that the physical state the organism seeks, idealized in its programmatic form, is a valued state. Value is present in this achievement.[3]

The general line of reasoning seems to be this: we can understand an organism's DNA as containing a set of instructions that direct the organism to seek certain states and avoid others. That is to say, according to the instructions encoded in the organism's DNA, some states are to-be-attained states and others are to-be-avoided states. We can think of these as proto-preferences, for the to-be-attained states and against the to-be-avoided states. The satisfaction of these proto-preferences constitute the

C.J. Preston and W. Ouderkirk (eds.), Nature, Value, Duty, 1–15.

organism's (nonconscious) purpose or goal—in Aristotelian language, its telos. Thus from the point of view of the instructions encoded in the organism's DNA, the telos is a "valued state." Because the telos is a valued state, Rolston reasons, the fulfillment of the telos involves the realization of value. This value is what Rolston refers to as "natural value."[4]

On this view, value would be present whenever some aspect of an organism's telos is realized. Although this would allow for value to be present in the absence of humans, it would also limit the possession of value to states that are valued by the genetic instructions of individual organisms. Perhaps with this in mind, Rolston expands upon his original analysis. First, he argues that species have their own telos, for the genetic set is as much a property of species as of individual organisms.[5] Thus the achievement of a species' genetic goals also has natural value. Second, he argues that organisms, species, ecosystems, and even nonliving geological and astronomical bodies have another kind of value, which he terms "systemic value." Things have systemic value in virtue of being a part of what Rolston calls "projective nature," the elements of and systems in the world that produce and support the teleological processes of life.[6] For Rolston, then, objective value comes from entities either achieving some aspect of their telos or contributing to the production or support of entities that have a telos. This value is objective since it can be generated regardless of whether any minds exist in the world.

While Rolston rejects the claim that all value is subjective, he does allow that subjective mental states of appreciation are essential to humans' experiences of value (i.e., essential to their valuing). However, he insists that appreciating value must not be confused with conferring value. He explains,

> We humans cannot know the value of anything in the natural world without some feeling about it, but it does not follow that the value is just how we feel about it. The value comes mediated, communicated by our experience, but it does not follow that the value is just the experience.[7]

CRITICISMS OF ROLSTON'S VIEW

However, there are a number of concerns that one might have about such a theory. In what follows, I will focus on one of these: doubts about using the teleological structure of organisms as a basis for ethical obligations. There are two questions that we need to ask about Rolston's account of natural value. First, why should we think it is appropriate to use the language of "value" and "valuing" to describe what's going on when genes direct the development and behavior of an organism? And second, even if we were to understand the behavior of an organism's genetic set as a type of valuing, is this the sort of valuing that is relevant to ethics—i.e., the kind that ultimately generates "oughts" for moral agents?[8]

Genetic sets valuing their goals

Let us consider the first question first. Many systems, including most notably organisms, seem to exhibit goal-directed behavior. To say that behavior is goal-directed in

this sense is not to say that it involves conscious or intentional purposes. Rather it is to say that the system operates in ways that systematically move toward some states and away from others, that the system exhibits what we might call "seeking and avoiding behavior." Many philosophers of science have tried to offer accounts of goal-directed behavior, explaining which features a system needs to have in order to count as goal-directed. Arturo Rosenblueth, Norbert Wiener, and Julian Bigelow, in their classic 1943 article, define goal-directed behavior as "behavior controlled by negative feed-back."[9] Others have tried to refine this model, claiming that the behavior of a system also has to be characterized by plasticity (the ability to reach the same goal in a number of different ways), persistence (the ability to compensate for obstacles that get in the way of reaching the goal), or self-regulation (the ability to reach the same goal despite a range of different changes in the external environment).[10] Still others reject the Rosenblueth et al. model, opting for a different type of analysis altogether. Larry Wright has offered what is perhaps that most popular alternative in this regard. He claims that a behavior is goal-directed if it is the case both that the behavior tends to bring about the goal, and that the behavior occurs because it tends to bring about the goal (where "because" is meant to indicate a causal relation).[11]

Rolston's description of the goal-directedness of organisms is much closer to the negative feedback model offered by Rosenblueth et al. than it is to the model offered by Wright. In fact, Rolston's description contains many of the same features mentioned by Rosenblueth et al. and their later defenders—not only negative feedback, but also suggestions of plasticity, persistence and self-regulation. Consider, for example, how Rolston describes the " 'genius' of life" that we find "encoded into genetic sets":

> There is some internal representation that is symbolically mediated in the coded "program" of the goal that is held forth. There is motion toward the execution of this goal, a checking against performance in the world, by means of some sentient, perceptive, or other responsive capacities with which to compare match and mismatch. Organisms measure success. On the basis of information received, the cybernetic system can reckon with the vicissitudes, opportunities, and adversities that the world presents.[12]

This account, like that of Rosenblueth et al., is a description of how the system operates—of what it does and how. In this way it differs from Wright's account, which offers a causal-historical explanation of why the system operates as it does.

In any case, it is worth noticing that neither Rosenblueth et al. and their defenders nor Wright use the language of "value" or "valuing" to describe the relationship between the system and its goals. But Rolston does want to do so in the case of organisms and the goals of their genetic sets. This leaves us with the following questions: Under what conditions is it appropriate to describe seeking and avoiding behavior as valuing? And have these conditions been met in the case of the genetically-directed seeking and avoiding behavior of organisms?

Clearly not everything that systematically moves toward certain states can be counted as valuing those states. If I throw marbles in the air, they will systematically move downward toward the ground—they do this in many different kinds of environment (indoors, outdoors, on the moon), despite changes we might make to their environment (introducing wind, raising or lowering the temperature), and often in spite of obstacles we might try to put in their way (blocking their downward path with a stick or a rock). But it would not be right to describe this by saying that the marbles value being on the ground. Similarly, the thermostat in my office, like the bodies of warm-blooded animals, has all sorts of mechanisms and processes that operate to keep the office temperature within a certain range. Why then would we be entitled to use talk of "values" and "valuing" in describing the temperature-regulation of warm-blooded animals but not the temperature-regulation of thermostats?

I am not sure that Rolston gives us a good answer to this question.[13] His discussion of artifacts suggests that he thinks it critical that valuing systems be the sort of systems that could be generated from "spontaneous nature," that their goals not be goals that were given to them by humans, and that they have "nonderivative, genuine autonomy (though environmentally situated) as spontaneous natural systems."[14] This set of criteria may be enough to distinguish thermostats from warm-blooded animals: thermostats aren't generated from spontaneous nature, and their goals were given to them by humans. Rolston's discussion of organisms also suggests that he thinks it critical that valuing systems be cybernetic systems. This may be enough to distinguish the operation of genes in organisms from the operation of gravity or other physical laws: the laws of physics are not cybernetic systems.

But while all of this might help us to distinguish genetic systems from other systems, it's not clear what any of these distinctions have to do with valuing. Why should we think that valuing can only be done by things that were generated by "spontaneous nature"? What is it about valuing that makes it the case that things that had their goals given to them by humans cannot do it? Why should the goals of systems that operate cybernetically get the special status of "valued states" while the goals of other systems do not?

Answering these questions requires us to get a clearer picture of what valuing is and how it is different from mere systematic goal-directed behavior. It is worth noticing that this isn't just a technical theoretical matter. The goals that we count as valued states, the seeking and avoiding behaviors that we count as instances of valuing, Rolston wants to claim, are ethically special. They make ethical claims on us that other goals do not. Their achievement generates value, and value generates ethical duties.[15] So what our ethical duties are will depend on which instances of systematic goal-directed behavior we count as instances of valuing.

Contemporary value theorists usually claim that to count as a case of valuing, a seeking or avoiding behavior must be in some way psychological—i.e., that valuing requires subjectivity of some kind.[16] Rolston, as well as a few biocentrists, question this claim.[17] After all, why privilege seeking and avoiding behavior that operates through psychological mechanisms as opposed to other kinds of mechanisms? As Kenneth Goodpaster points out, in some sense it is just evolutionary luck that we

have evolved ways to "maintain, protect and advance" our lives that rely on conscious representations of our environment, while other organisms have evolved ways to do this that rely on nonconscious representations, or perhaps in some cases, don't rely on any representations at all.[18] From an evolutionary perspective, it seems arbitrary and unfair to pick out psychological mechanisms as morally important while ignoring other mechanisms that do the very same thing (i.e., help the organism gather and process information about its environment and respond in light of this information) in a different way.

But we can and should raise this same sort of question about Rolston's own position. Why privilege the seeking and avoiding behavior of organismic systems as opposed to other kinds of systems? It doesn't seem fair to pick out goal-directed systems that operate cybernetically and without human intervention as morally important while ignoring other systems that do the very same thing (systematically seek some states and avoid others) but in different ways. After all, what's so morally significant about systems that operate cybernetically? It may be an amazing feature of the world that some things are capable of gathering, storing, and processing information of various kinds. But our world has many other amazing features too—the formation of black holes, the growth of crystals, the "life" cycle of stars. We need some reason for thinking that cybernetic systems are special in some way that makes them specially deserving of our moral attention. Likewise, why should we think that things that arise from "spontaneous nature" are morally important in a way that other things aren't? What's so great about arising spontaneously as opposed to being formed by a thoughtful and creative human designer? These are all questions that we should want answers to before accepting Rolston's claims (and the ethical implications they bring with them) about which behaviors are to count as instances of valuing.

The value of achieving genetic goals

But let us suppose that Rolston can provide an account of what makes it appropriate to use the language of "value" and "valuing" to describe the relationship between organisms and their genetic goals, but not the relationship between other goal-directed systems and their goals. (Nothing I've said argues that he cannot provide such an account, only that so far, I believe, he has not.) The next worry is whether this would be enough to ground the kinds of ethical claims he wants to make—claims about how we ought to behave toward things that engage in valuing and the states that they value. To answer this question, we first need to get a clearer picture of what role the concept of value plays in Rolston's overall ethical theory.

Perhaps most clearly, Rolston takes value to be a normative concept—as he puts it, "[v]alue generates duty."[19] So whatever value is, it is the kind of thing that generates "oughts" for moral agents. Insofar as a thing is valuable (i.e., "has value"; "is a good thing") in this way, moral agents have an obligation to behave in certain ways toward it—for example, to protect it, promote it, endorse it, achieve it, respect it, etc., depending on what kind of thing it is and the particular way(s) in which it is valuable. This claim about value isn't unique to Rolston; this is how the concept of value is

typically understood within ethical theory. It explains why theories about what we ought to do have an interest in the question of which things in the world have value.

We can think of this as a description of the general ethical concept of value—or "ethical value" for short. The question we are asking of Rolston's theory, then, is this: what is the relationship between what Rolston calls "natural value" and what I am calling "ethical value"? More precisely, what reasons do we have for thinking that if something involves the achievement of genetic goals (i.e., if it has natural value), it is thereby something that moral agents have a duty to protect, promote, endorse, etc. (i.e., it thereby has ethical value)? What reasons has Rolston given us for thinking that anything with natural value would have to have ethical value?

In order to answer this question, we need to understand what role natural value plays in Rolston's overall theory of value. Specifically, we need to know whether this account of natural value is supposed to be a conceptual explication of the concept of ethical value itself—i.e., a claim about *what ethical value is*, or whether it is supposed to be a (partial) story about which things fall under that concept—i.e., a claim about *which things are ethically valuable*.

If Rolston is offering us an account of what ethical value is, then we can think of the account of natural value as a proposal for re-defining "ethical value" as "the achievement of genetic goals." On this understanding of Rolston's project, he would be arguing for a naturalistic reduction of value; an analysis of what all ethical value, at its most basic level, is. If Rolston means for his account of natural value to be providing a definition of ethical value, then accepting his account would require us to accept that the claim "everything with natural value has ethical value" is a tautology, for ethical value on this view *just is* natural value.

However, I think it is fairly clear that in describing natural value Rolston does not mean to be offering us an account of what ethical value is. His account of natural value is not a definition or a conceptual explication of the concept of ethical value, but rather a description of one particular way that things can have ethical value. Rolston is a pluralist about value: he believes that value comes in different kinds and not just in different amounts. Natural value is one of the many kinds of value that he describes (others include aesthetic value, religious value, historical value, and systemic value, just to name a few).[20] Natural value is best understood as a subset within the more general category of ethical value, for it is just one of many ways that a thing can come to have ethical value. If this is right, then Rolston should be understood as offering an account of which things have ethical value rather than an account of what ethical value is. His claim, so understood, is that having natural value is a sufficient condition for having ethical value—not by definition or as a conceptual claim, but just as a matter of fact.

If this is what Rolston is claiming, then we must next ask what reasons there are for thinking that he is right—that anything with natural value will in fact have ethical value. Why should we think that every time a genetic set's goal is achieved, this is a good thing? One possible explanation might go like this: the attainment of an organism's genetic goals is good for that organism—i.e., it increases that organism's well-being. Since increasing a thing's well-being has ethical value (i.e., it is a good thing), one might argue, the attainment of genetic goals has ethical value.

The key claim in the above line of reasoning is that the attainment of an organism's genetic goals is good for that organism. Although this may be true in many of the cases we typically encounter, there are still many cases in which it is not true. It is only when an organism is in an environment to which it is well adapted that the ways that its genetic set directs it to operate will increase or at least sustain its well-being.[21] When an organism is in an environment to which it is not well adapted, the very same behaviors can instead make it worse off. Consider as an example the preference for sweet-tasting foods encoded in humans' genetic instructions. Such a preference might have been beneficial to our ancestors in the environment in which they evolved—by leading them to eat nutritious ripe fruits rather than less nutritious and/or toxic plants. But in our present environment, where refined sugars are plentiful, this trait has become detrimental—it leads to obesity, diabetes, and other diseases.[22] Cases of maladaptation such as this can happen for a number of reasons: sometimes environmental change happens more quickly than evolutionary mechanisms of adaptation can keep pace with; sometimes there are constraints (structural constraints, for instance) that make certain adaptations impossible; sometimes adaptation would require tradeoffs (e.g., smaller size) that would be even more detrimental to selective fitness.[23] It may be because so much of human history has taken place in an era of relative climatic stability that we tend to think of cases of maladaptation as the exception rather than the rule. The organisms we come across tend to be fairly well adapted to the environments in which we find them. But it is worth noticing that this needn't be the case, and in fact it may not continue to be the case for very much longer. If the current climate change models are correct, maladaptation may soon be much more widespread.[24] So we cannot say that the achievement of an organism's genetic goals has ethical value because it is good for that organism, since the achievement of its genetic goals may not *be* good for the organism.

But if we cannot say that the achievement of an organism's genetic goals is good for the individual organism, perhaps we could say that it is good for the species. After all, in cases where it is detrimental to an organism to achieve its genetic goals, isn't this often beneficial to the species as a whole? That organisms with maladapted sets of genetic instructions don't fare so well is essential to the operation of natural selection. It might be bad for the individual organisms that have these maladapted genetic instructions, but it is ultimately good for the species because it is what allows advantageous traits to become more frequent and disadvantageous traits less frequent in the population.

However, as intuitively plausible as this might sound, cases of maladaptation also show that the achievement of organisms' genetic goals needn't contribute to the well-being of the species. In cases where a species either has a beneficial trait present in the population or can produce one through mutation and natural selection so as to become better adapted to its current circumstances, it might be true that maladapted genetic instructions will kill the individual organism but leave the species better off for having done so. But not all cases are like this. If the environmental context of a species shifts too quickly for genetic mutations to arise that might do the species any good, then the member organisms' pursuit of their genetic goals may well lead the

entire species to extinction. If it were the case that natural selection always resulted in better-adapted species, then perhaps the attainment of genetic goals would always be good for the species. But natural selection does not always result in better-adapted species; sometimes it results instead in species' extinction. In these cases, we cannot say that the attainment of genetic goals was good for the species. If this is right, then we cannot explain why things with natural value have ethical value by claiming that the attainment of an organism's genetic goals increases the well-being of the organism's species.

It is worth noting that the above claim about species could be made about any other holistic entity (ecosystem, biosphere, etc.) as well. For any living system that is disposed (via the genetic instructions encoded into the DNA of organisms) to do certain things, if circumstances changed quickly and dramatically enough, its doing those things could lead to its own destruction. Facts about what it takes for a living system to flourish or even just to survive are dependent upon facts about its environmental context. When the environmental context shifts, so may facts about what is required in order for a system to flourish within it. Since genetic instructions cannot always keep pace with such changes, it will always be an open question whether following those instructions will make the system better or worse off. For this reason, it will always be an open question whether the achievement of a genetic goal will have a good effect or a bad effect on the well-being of such systems. If this is right, then there does not appear to be much hope for establishing the ethical value of things with natural value by appealing to natural value's contribution to well-being—of individual organisms, species, or other holistic entities.

That said, perhaps we should be looking not for an explanation that appeals to some claim about well-being—about what is good for this or that—but rather for an explanation that appeals directly to some claim about what is good in general. After all, not all claims about what is good or bad in the world have to be claims about what is good or bad *for* something. So perhaps the claim is not that the achievement of genetic goals is always good for something or another, but rather that the achievement of genetic goals is always just a good thing in the world. If this were the claim, then what reasons might we have for thinking that it is true? Why should we think that every time an organism achieves a genetic goal, this is a good thing?

Before answering this question, it is worth noting that the claim that something is "a good thing" is ambiguous in a very important way. In claiming that the achievement of a genetic goal is a good thing, we might mean that this achievement makes a net positive contribution to the world; that every time a genetic goal is achieved, the world is overall better off for it. I will refer to this sense of "being a good thing" as "being good overall." Alternatively, we might mean that this achievement makes *some* positive contribution to the world, though this is consistent with the overall net result being negative. On this second meaning, every time a genetic goal is achieved, some goodness is thereby added to the world, though this may not be enough to compensate for badness that is also generated as a result of the goal's achievement. I will refer to this second sense of "being a good thing" as "being good in some way."

Let us first consider whether we have reason to think that the achievement of a genetic goal will be good overall. Does the achievement of a genetic goal necessarily make the world a better place? Rolston does point out that many of the behaviors of organisms that we think of as bad (predation, selfishness, etc.) play an important role in generating things that we think of as good (species survival, biodiversity, etc.). In nature, he says, "there are disvalues as surely as there are values, and the disvalues systematically drive the value achievements."[25] So perhaps every achievement of a genetic goal, even when it doesn't seem to be a good thing, is good because it ultimately plays a role in bringing about some greater good. One might think that Rolston's "systemic value" has an important role to play in explaining why this would be so: by invoking systemic value, Rolston might be able to claim that the achievement of these goals is a good thing, for it is what keeps the processes of evolution working. Since the natural world and its processes are, Rolston claims, valuable, those things which enable them to function are also valuable.

However, even if this were true in some general sense, there are surely many particular cases in which it fails. If Jeff's cat follows her genetically-given goals by catching a bird outdoors and "playing" with it in ways that kill it slowly and painfully, this doesn't seem to make the world a better place overall. While the cat might be made happy by this, the bird has probably been made more unhappy, and the cat might have been just as happy playing with a toy as with the bird. While the bird might have disadvantageous traits that get selected out of the population this way, this needn't be the case. It could be a bird with perfectly advantageous traits that just happened to be in the wrong place at the wrong time. While the bird's decomposing body might serve as nutrients for other living things, this also needn't be the case. Jeff might put the body in a plastic bag and toss it in the garbage for deposit in the local landfill or garbage incinerator. It seems that for any contribution to evolutionary processes that we can think of, it might or might not happen. Thus while it might be good overall that predator-prey relationships exist in the world in general, or that cats have predatory instincts in general, there might not be any net value added to the world by this particular cat achieving this particular genetic goal in this particular circumstance.

At points Rolston seems to agree with this. He explicitly rejects the "panglossian" view that there aren't any disvalues in nature, that somehow everything that happens in nature is for the best.[26] By rejecting the panglossian view, Rolston gives up the general principle that might have assured us of the overall goodness of the achievement of each genetic goal. Without this principle, even if we can say in general that the continued existence of life on earth is a good thing, this won't be enough to let us conclude in any particular case that the achievement of an organism's genetic goals is a good thing—i.e., has value in general. In particular cases, the achievement of a genetic goal may or may not have systemic value—whether it does will depend on whether its contribution to the production and/or support of living systems is on balance positive.

But even if Rolston were to adopt the panglossian view and claim that the achievement of genetic goals is always a good thing because it always makes a positive net contribution to the production or support of living systems, this claim wouldn't get him very far. His account of biogenic value was supposed to answer the question, "In

the absence of humans, are living systems valuable?" Rolston's answer to this question was, "Yes, because the achievement of genetic goals has value." Given this argumentative strategy, accepting the panglossian view would only leave him with a circular argument. The circular argument can be represented this way: (i) living systems are valuable because they involve the achievement of genetic goals; (ii) the achievement of genetic goals is valuable because it contributes to the production and support of living systems; (iii) contributing to the production and support of living systems is valuable because living systems are valuable.

If this is right, then we have not yet seen good reasons for thinking that the achievement of a genetic goal will always make a positive net contribution to the world. But even if the achievement of a genetic goal isn't always good overall, we may still think that it is always good in some way. It is worth noticing that this is all Rolston needs to claim in order to show that value can exist in the world independently of whether any minds exist in the world. So might there be reasons for thinking that the achievement of a genetic goal is always good in some way?

It might be useful to begin by reminding ourselves why it seemed to make sense to think of the achievement of genetic goals as a kind of value in the first place. What we saw above was that from the point of view of the "normative set" of the genetic instructions, genetic goals have value in the sense that they have the status of to-be-attained. That is to say, they are states that the genetic set instructs the organism to seek; they are what I referred to earlier as the "proto-preferences" of the genetic set. In asking questions about how this is related to ethical value, then, we are essentially asking whether we have reason to think that anything that is valu*ed* (in this case, by the genetic set) is thereby valu*able* (i.e., to be protected, promoted, endorsed, etc. by moral agents) in some way.

In claiming that that which is valued is thereby valuable, Rolston's theory is structurally similar to preference-satisfaction views in anthropocentric ethics. Preference-satisfaction views claim that the satisfaction of human preferences—i.e., the achievement of the states of the world that we in fact value—is always valuable in some way. Preference-satisfaction theorists' claims about human preferences are nearly identical to Rolston's claims about the genetic set. They claim, to paraphrase what Rolston says about the genetic set, that our set of preferences is a normative set; it distinguishes between what is and what ought to be; our preferences are valued states; value is present in their achievement.[27] The line of reasoning is the same; the only difference is whose valuings each theory is willing to count as generating the value.

Given the similarity, it might be useful to think about whether we would accept this line of reasoning in the case human valuings, since they (unlike genetic goals) at least have the advantage of being widely accepted as genuine instances of valuing. If something has the property of being valued by someone, does that fact make it valuable (not valuable overall, just valuable in some way)? Does the fact that somebody values something give moral agents a reason (not necessarily an overriding reason—just *a* reason) to protect it, promote it, endorse it, etc.? I would argue that it does not. A neo-Nazi might value what she thinks of as "racial purity," but I do not think this fact makes "racial purity" valuable—not even a little bit. It doesn't give moral agents

any reason—not even a small one—to promote or endorse "racial purity." A rapist might value raping people, but I do not think this fact adds to the value (or even subtracts from the disvalue) of the act of rape. Rape is not made any better by the fact that rapists have a preference for it. Thomas Nagel might value a piece of parsley being on the moon, but this fact does make the presence of parsley on the moon valuable—it does not make it something that moral agents have a reason (even a small one) to promote or endorse.[28]

The fact is that we can—and sometimes do—value all sorts of things that aren't in fact valuable. Sometimes we, like the racist, value things that are disvaluable. Other times we, like Nagel, value things that are merely valueless. As valuers we are capable of getting it wrong—in some cases quite drastically wrong. (This is one of the well-known problems with preference-satisfaction views. People's actual preferences can be irrational, cruel, uninformed, and the like.[29]) Most of us probably can look back over our lives and identify things that we erroneously valued at one point or another. And most of us critically assess our own valuings from time to time in the hopes of avoiding these sorts of errors. However, if valuing something were enough to make it valuable, then it would be impossible to value something that is not valuable, since our valuing it would *make* it valuable. If valuing something were enough to make it valuable, our worries about falling into error would be misplaced.

I would argue that moral obligations are not generated by any instance of valuing whatsoever, but rather only by instances of *appropriate* valuing. It isn't that which is valu*ed* that generates obligations for moral agents, but rather that which is valu*able*. In fact, I think that this is the attitude that most of us quite sensibly take toward the instances of valuing we encounter. Not only do we not think we have any obligation to respect the racial preferences of racists—not even a little tiny obligation—but most of us also think that our own valuings should only have force insofar as they are not mistakes. This fact explains why we bother to critically reflect on our own valuings and revise them if we think they've gone wrong.

One might object that limiting the realm of the "valuable," and thus limiting the source of moral obligations, to instances of appropriate valuing is too restrictive. In the first place, one might argue, we often do take other people's or our own valuings to generate obligations without checking to make sure they are not mistaken. When you tell me that you'd prefer to schedule our meeting for later in the day, I don't stop to ask whether your scheduling preferences are really the best ones for you to have. I take your preference as a given and think about whether we can find a way to satisfy it. Likewise, if you tell me that Minneapolis is a charming city, I will believe you unless I have some reason not to trust your judgments about such matters. But the fact that we often don't take the time to assess the appropriateness of others' valuings is, I think, simply a testament to how much we are usually inclined to trust people to get it right. When you tell me that it's raining outside, I'll believe you unless I have some reason not to. Likewise, when you tell me that afternoon meetings are better for you, or that Minneapolis is a charming city, I'll believe you unless I have some reason not to. Most of us are willing to take the fact that people value a thing to be some evidence that the thing is valuable. Of course, this is compatible with other evidence ultimately convincing us that it is not valuable.