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# BOOK REVIEW

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Patrick Curry, *Ecological Ethics: An Introduction*. Malden, Massachusetts: Polity Press, 2007, 173 pages.

Were I in Bath having drinks with Patrick Curry, we would have much to agree about. Explaining his choice of title of his book, *Ecological Ethics*, he rightly points out that the more common descriptor “environmental ethics” presupposes a dualism between human beings and the nonhuman environment—an assumption which is itself anthropocentric (p. 4). For philosophers interested in studying the human/nonhuman dynamic, the legitimacy of anthropocentrism is itself an open question. Because the word ‘ecology’ treats humans, as biota, as integral parts of ecological systems, the phrase “ecological ethics” is less presumptuous and hence more accurate. The word ‘ecological’ also has the benefit of conveying the message that the subject is *not* going to involve extending moral considerability from humans out into the “environment.” Instead, ecological systems as the locus of value provide the starting point for the elaboration of ethics (p. 2). For Curry, as for Leopold (1960) and Callicott (1989), “ecological community” is coextensive with the ethical community.

To correlate the ethical community with the biotic community within the rubric of “ecological ethics” is nothing novel. Curry’s claim that “there is something ancient about an ecological ethic” (p. 7) got me think-

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ing: prior to Abrahamic monotheism and Greek rationalism, ancient peoples, particularly nomadic hunter-gatherers, probably considered themselves as integral parts of what encompassed them, moving with herds, in concert with meteorological and seasonal changes, seeing themselves as one amongst other living beings. They probably did not see themselves apart from the “environment” as we have learned to do. Then with the advent of agriculture, linear furrows and controlled inundations must have fostered an addictive sense of security from flood and famine. Later, the innovations of industrial civilization further distanced us from the caprice of nature’s wild vicissitudes. Yet that comfort comes at the expense of lost awareness of our responsibilities as *biotic* citizens. Therefore, Curry says, following Sylvan (1973), we need a new ecological ethic since traditional Western morality “is no longer up to the job” (*ibid.*).

Curry remarks that ethics, cast in this light, is not something “optional,” something to be addressed after one’s belly is full, debts settled, and lodging secured. Rather, ethics cuts directly to the core of human action, of all human activity (p. 5)—a claim reminiscent of Socrates’ exhortation to Thrasymachus that it is no small matter that they are discussing, nothing of less importance than the right way to live one’s life (Plato 2005, p. 603).

Over the first sips of ale, I would praise him for giving his book a simple and straightforward structure that makes a challenging subject accessible, especially to students. After laying down the groundwork of basic concepts in moral philosophy (chapter 3)—objectivism versus relativism, the problem of the is/ought gap, religious morality and environmental philosophy (domination, stewardship, and managerialism), and virtue and rule-based ethics (chapter 4)—Curry addresses axiology (chapter 5). Are humans the sole locus of value (anthropocentrism), or are there other entities worthy of some sort of moral consideration who themselves do not carry the burden of moral responsibility (zoocentrism, biocentrism, ecocentrism)? Curry answers the latter in the affirmative, arguing that ontological interconnectedness of humans with other living beings within ecological systems discloses that something greater than humanity is the locus of value (p. 46).

The most useful part of the book for my students out in Utah would be the middle chapters (6–8) in which Curry casts degrees of nonanthro-

pocentrism in shades of green. These shades range from light green or “shallow” anthropocentric ethics such as Bookchin’s Social Ecology (p. 50), Hardin’s Lifeboat Ethics (pp. 52–54), and mainstream environmentalism (p. 51), through medium green ethics based on the extension of traditional human-oriented moral philosophy to nonhumans such as Singer’s Animal Liberation (pp. 56–59), Regan’s Animal Rights (pp. 59–60), and Taylor’s Biocentrism (pp. 60–62). Curry proceeds to the dark green ethics of ecocentrism, such as Land Ethics (pp. 65–68), the Gaia Hypothesis (pp. 68–71), Deep Ecology (pp. 71–81), and Deep Green Theory (pp. 81–84). Curry uses Sylvan as a segue into some of the less metaphysically and more politically-oriented theories of ecological ethics such as Left Biocentrism (pp. 86–89)—for me the most informative part of the book—and Ecofeminism (pp. 95–99). It is thoroughgoing ecocentrism, which locates the source of all value in ecological systems, which for Curry is the most plausible axiology of the field.

After a long, slow draught, I would have to ask: why the compulsion to include Chapter 2, “The Earth in Crisis?” The extent to which there is or is not some kind of global biospherical crisis is a topic unto itself, with biologists and economists taking sides ever since at least the publication of Lynn White’s (1967) famous essay forty years ago, followed by the work of Hardin (1968), Ehrlich (1969), Commoner (1972), and others. Those who take the time to crack a book on ecological ethics are going to be predisposed *a priori* to accept the notion that there is some kind of ecologic crisis and feel the urgency that some kind of reconfiguration of the fundamental substructure of industrial civilization needs to take place post haste. If that is not obvious enough to potential readers, then no amount of crisp argumentation and amassed data is going to change their minds. Doubtless they will, like a majority of my students, hold out the juliansimonesque hope (Simon 1994, 1996) that resource depletion and pollution will be solved technologically (as in: yes, copper is finite, but we don’t need much copper anymore anyway, since fiber optic was invented!), or like the Reagan Administration Secretary of the Interior James Watt,<sup>1</sup> hold that wise land-use policy is based on the efficient utilization of natural resources in preparation for the End of Days (as in: the natural world as we know it will be annihilated, and we don’t want to let resources go to waste!), or like oil industry analysts and their minions in

government, hold that global warming is nothing more than a regular Milankovitch oscillation and nothing to be alarmed about (as in: never mind the fact that the steady transformation of carbon stored in fossil fuels into atmospheric carbon dioxide and simultaneous deforestation has proceeded unabated since the Industrial Revolution; after all, three decades ago Dave Forman [1986] and other environmentalists were grimly portending the onslaught of an ice age!)

It would be over a second round, this time with a dram of single-malt scotch (at least for me), that I would have to raise a central objection: Both Curry and I agree that the devaluation of nonhuman nature is the paramount problem in Western culture and that the genealogy of this problem is traceable back to what Curry refers to as the “process of modernism” (p. 30)—or what I call Modernity, capitalized to denote a very specific process and to differentiate it from colloquial synonymy with contemporaneity. We do not see eye-to-eye on the defining feature of Modernity, and therefore, the “postmodern” (p. 30) palliative.

In a pivotal section of the book, Curry identifies “secularism” as the defining feature of Modernity (pp. 100–03). As Curry had convincingly argued earlier (pp. 28–30), Modernity departs from the Medieval worldview by conveniently bifurcating the subject matter of metaphysics into two areas of inquiry, science and religion (in the language of Aristotle’s four causes (1941b, p. 752), the material and efficient from the formal and final)—the domain of science is the efficient causation of material substance, while the domain of religion is the ultimate purpose of a supernatural God. During the European Renaissance (beginning in the seventeenth century), scientists, theologians, and philosophers articulated a common vision: science investigates the predictable and clockwork-like operations of nature without having to infringe, as Curry notes in passing (p. 29), on the theological search as to why there is any purposiveness in nature at all. Reason, exercised through science, can disclose an understanding of the mechanics of nature. The added benefit of that knowledge enables *mankind* to be able to *manage* and *manipulate* nature for human advantage, as Bacon (2002) asseverates in *The New Organon*.

Curry concludes that Modern scientism is founded on a secular “cult of reason” (ibid.) responsible for the devaluation and denigration of nonhuman nature and which has precipitated an ecological crisis. From this premise Curry posits the central thesis of his book: the rediscovery of

value in nature requires some sort of “post-secular” (p. 104) quasi-spirituality. Secularism is the impediment that needs to be cast aside.

At this juncture of the evening I would have to lean forward on the bar, head lowered, and respectfully but adamantly disagree. Curry misidentifies the core concept of Modernity which has led to the defilement of the biosphere at human hands. Curry acknowledges the core cause in passing, but its significance appears to have escaped him.

This core cause is not *secularism* but *mechanism*: conceiving of nature as machine. This is the essential attribute of Modernity that has precipitated deleterious ecological consequences. Modern thinkers, as Curry notes (p. 29, p. 102), tended to see the universe as a superlatively exquisite machine, the handiwork of God. Nature is an immense mechanism, created by God and designed to operate according to the mathematical laws of physics. All natural motions—including metabolism—can be explained in terms of material and efficient causation without needing to refer to formal or final causation. Ultimate formal and final causation refers to God, and God is outside nature. Thus the undergirding of the Modern view of nature is mechanistic materialism (Mechanism) advocated by Bacon (2002), Galileo (1960), Harvey (1993), Hobbes (1985), Descartes (1966, 1991, 1993), Newton (1931, 1999) and others.

The ecological ethicist must not overlook that fact the mechanization of nature is an essential feature of Western anthropocentrism: mind and matter, most forcefully articulated by Descartes in the *Meditations* (1993), are ontologically discrete substances. Mind distinguishes humans from the rest of nature. Free will is an attribute of rationality and allows humans to wriggle from the shackles of causal determinism. And the ability to guide one’s own actions gives each subject purpose for oneself—that is, intrinsic value. As rational beings, humans have intrinsic value, and in this sense are set apart from natural flux.

Machines do not have any purpose or value of their own; the purpose and value of a machine is always extrinsic to the machine itself. The source of purposiveness of natural processes (such as growth and reproduction in living things) is not innate. If there is any teleology in nature, it is there by design, embedded by an external source—God. In short, Modernism holds that nature is material and operates mechanically according to strict causal laws; that all natural phenomena can be

described in terms of inert matter in motion; and that nature is devoid of inherent value or purpose.

The practical outcome of the mechanical view of nature (Mechanism) has been the instrumentalization of ecological systems for economic ends. Qua machines, the only value nonhuman fauna, flora, fungi, and inanimate matter have is use-value for humans. As Curry comments, the mechanical view of nature leads directly to an economic theory; nonhuman nature is “a set of inert raw resources to be mastered and exploited by human reason” (p. 29). (Curry seems to be referencing Locke’s [1970] argument in “Of Property” of the *Second Treatise*—value in nonhuman nature is latent value and humans can “release” that value through labor by making commodities.) But it is Mechanism, not scientific secularism, which lays the groundwork of the devaluation of nonhuman nature to mere economic resource. As a reader—albeit a vigilantly critical one—I found this key insight beneath, below, and beside Curry’s main argument, but it never came to the fore. Instead, it seemed to be ignored in favor of a secularization narrative.

The mechanical view of nature has serious implications for the philosophy of biology. Since ecological ethics is about biological systems, these implications demand attention. As material bodies, nonhuman animals “move like machines” (Descartes 1991, pp. 365–66), which is to say, operate according to the deterministic laws of physics just like man-made machines. To be sure, organisms are splendidly intricate and complex physico-chemical machines—the difference between windmills and whippoorwills is that windmills spring from Man’s hand and whippoorwills spring from God’s hand. Organisms are mechanical in the sense they operate *automatically*. When a dog chases a cat, the action is determined by the dog’s physiological makeup, and does not have motivation in mentation. As Descartes explicitly states in a letter to the Marquess of Newcastle “...the reason why animals do not speak as we do is not that they lack the organs but that they have no thoughts” (1991, p. 303). And no mentation, no subjectivity, no intrinsic value.

In turn, this philosophy of biology has perverse normative consequences that an introductory text on ecological ethics should treat in at least a few paragraphs—specifically, if nonhuman biota are machines, they are worthy of no more moral consideration than my Festina watch. The horrific abuse of the dogs of former N.F.L. star Michael Vick’s Bad

Newz Kennels—dogs chained to buried car axels; executed by electrocution, hanging, and drowning for losing fights; and all 42 of a female breeding dog's teeth forcibly removed, probably with pliers, to protect males from injury during sexual intercourse (MaCur 2008)—is only a recent example of the ethical repercussions of the Cartesian biomachine ontology. Although Descartes' philosophy of biology is discredited in academe, and most pet owners probably think pets are something more than mere automata, biomechanics allied with metaphysical dualism has had profound effects on our conception of nonhuman organisms. Factory farming, the fundament of animal agriculture, is a less attention-grabbing but more pervasive and ecologically reprehensible than Vick's dog-fighting gulag.

A principal malefactor—I would say *the* principal malefactor—in the mechanization, bifurcation, and devaluation of nature is Descartes; I agree with biologist Ernst Mayr (1982, p. 97) that perhaps no single thinker has contributed more to the mechanistic view of nature than Descartes. Unfortunately Curry mentions Descartes only twice in passing, which in a book claiming to address the genealogy of contemporary ecological degradation and pinpointing the prime culprit as Modernity, is a serious shortfall. Environmental philosophy must treat the metaphysical and axiological failures of the mechanical view of nature in order to lay a new foundation for ecological ethics.

Thus it is the genealogy, and subsequently the solution of the devaluation of ecological systems about which Curry and I disagree. While it is true that Modernity is defined in part as a secular response to the limits of Medieval sectarianism, my studies have not led me to draw the conclusion that secularism is per se the ailment from which we need relief. The ailment from which we need relief is a specific component of the process of Modernism, namely, Mechanism. And the remedy to Mechanism is not an atavistic relapse into religiosity but a new form of secularism. This new secularism must include a metaphysics which avoids nonnatural ontological categories, which takes into account the lessons of empirical science, and which frames public policy on the environment in those terms. What philosophers can do as biotic citizens is delineate a naturalistic metaphysics which does justice to the complexity, beauty, and wonder of the more-than-human world, qualities of nonhuman nature which are phenomenologically given.

Certainly the mechanical view of nature has some truth. As Newton made clear in *The Mathematical Principles of Natural Philosophy* (1999) and the *Optiks* (1931), physical systems exhibit mechanistic properties. Medical science is founded in large part on the mechanics of biological systems and has had impressive success in analyzing and manipulating biotic function. Animals exhibit rigid behavior patterns, and seeing the ratcheting motion of a gecko's tail or the robotic strut of a pigeon evokes mechanistic metaphors. Nonetheless, the conclusion that biota can be understood solely in mechanistic terms is not entailed by the premise that biota exhibit mechanistic properties.

Given the stocasticity of natural systems and the inability to explain evolution solely in mechanistic terms, nature must have *extra*-mechanistic properties. Humanities scholar Frederick Turner has named this property *kalogenesis*, derived from the Greek words 'kalós' (meaning beauty) and the stem 'genesis' (to generate) (1992, 237). While detailing a naturalistic alternative to mechanistic metaphysics is far beyond the scope of this review, we can in passing note that there is good reason to assert that the process generating beauty—as manifested in the phenomenon of life—is intrinsic to ecological systems. In terms of nonhuman biota, one of these extra-mechanistic properties is to express preference. If human selves have intrinsic value by virtue of showing preference, as subjects then other biota must also. Even plants, without the cephalization of animals, open or close their flowers, show preference by tilting their leaves toward the morning sun and spreading out their roots around the rock outcropping in order to penetrate the moist soil below. Human consciousness is *not* the sole locus of valuation. Nonhumans, like humans, have intrinsic value.

The incompleteness of mechanistic metaphysics is illustrated by biological evolution—machines have no impetus to become anything other than what they are already. There must be some ontological integrant driving the process. The traditional answer to this question in the Western tradition has been that this ontological integrant is God. But the empirical evidence of some serious signs of imperfection of design, contained in the fossil record and observable in the morphology of existing species, weighs heavily against this answer. Darwin himself wrestled with this tension between supernatural Providence and brute biological fact in his *Autobiography* (1958, 87) and correspondence, especially to Harvard botanist Asa Gray (1993, p. 224).

The other more interesting and intellectually honest alternative to theism is nonmechanistic naturalism. Here ecological ethics has a rich minority tradition to draw from: Heraclitus (1975), Aristotle (1941a), Spinoza (1982), Bergson (1983), Alexander (1921), Deleuze (1990), and especially Whitehead (1978), particularly the atheistic formulation of Whitehead by Donald Sherburne (1971, 1986).

Inspired by the work of philosopher Frederick Ferré (1996), the late ecologist Frank Golley and I suggest in *The Philosophy of Ecology* (2000, p. 33) that ecological studies are models of post-Modern science. Ecology is post-Modern in the sense that it calls into question one of the most cherished assumptions of Modern science, namely, the manipulability of natural systems. This divergence of ecology from Modernity is the basis of ecologist Paul Sears' claim forty years ago that ecology is a "subversive science" (1964). Ecology is subversive because it disputes a central tenet of Modernity—nature-as-machine. It is clear to me that the lessons of ecological science provide the empirical data for an improved extra-mechanistic metaphysics upon which to build an ethic useful for making public policy decisions on the environment. These lessons are secular insofar as they are lessons of natural science.

Here I turn down Curry's invitation to renounce secularism as the post-Modern palliative (pp. 103–07). Acknowledging the unacceptability of metaphysical dualism (p. 102), Curry conjectures that the "resacralization of nature" (p. 104)—using Tom Cheetham's (1993) phrase—has the potency to inspire an "ecocentric spirituality" in the mold of animism (p. 107). Curry's defense of injecting ecological ethics with a full dose of spirituality (p. 100) is that much ecological (for example, Deep Ecology) and anti-ecological (for example, global free-market Capitalism) discourse is itself quasi-religious (he characterizes, not inappropriately, the avaricious fervor of multinational corporations as a "crypto-religion"). My response at the bar would be that just because these discourses are fueled by dogmatic irrationalism does not mean that we should not try to set a more cool, measured tone based on reason.

Which brings us back to spirituality and ecological ethics. Those of us who have been force-fed religion our entire lives and for the last seven years have lived through the hegemony of a stumbling Empire with a stammering President who communicates with God and sets foreign, domestic and environmental policy accordingly do not relish the theification of our discipline. As an Enlightenment-indoctrinated American, I find

the ardent secularism of Callicott (1989), Warren (2000), Sylvan (*né* Routley) and Bennett (1994), Bookchin (1995), Light and Katz (1996), Fox (2006) and others more promising. Curry persuasively argues that ecocentrism cannot afford to marginalize and abandon significant sources of valuing nature, such as the emotional, cultural, and spiritual, that ecological ethics requires not mere *respect* for the wild but *reverence* (p. 83). I agree with everything about this statement except the necessity for spirituality, which for me invokes supernaturalism. Unless I am a closet theist without knowing it myself, I believe reverence for nature—awe, wonder, sublimity—can be explained in terms of extra-mechanistic naturalistic metaphysics. Appealing to qualities which cannot be explained in terms of logical categories and which are not remotely empirically verifiable as a starting point for ecological ethics and environmental policy seems to be no more hopeful than getting an Orthodox Jew, an Evangelical Christian, and a Wahhabi Muslim to the same table and encouraging them to agree on which is the authentic religion of Abraham.

So despite my shared admiration of Feyerabend (1987) with Curry and their critique of rationality, I remain an acolyte of the Cult of Reason. While fully admitting the force of emotive drives (obedience, care, love, lust, faith, fear) in human psychology (else we would be Vulcans living our lives like Spock), I nonetheless think that the insights of sentiments must, to the best of our ability, be cast and recast in the rhetoric of rationality appropriate for the public square.

The antidote to the malaise of Modernity is unabashedly secular. I fail to see the benefit of appealing to a neo-animistic “collective spirituality” (p. 105) in a book intended to contribute to public discourse on environmental problems and posit solutions. We need to get back to the basics: we need to delineate an extra-mechanistic metaphysics informed empirically by the lessons of ecology in order to lay the axiological foundation for a robust ethic capable of framing public policy on the environment.

All books have fundamental assumptions upon which they are written. Curry’s is the association of secularism with ecological degradation. This assumption effectuates and explains his sanguine optimism for a post-secular “ecological spirituality” (p. 138), a high hope that I do not share. Even so, before parting ways while standing in front of the pub on

the rain-slickened English sidewalk, I would praise him for writing a fine little book.

#### NOTE

1. Explaining his conception of his job as administrator of public lands, Watt stated publicly: "That is the delicate balance the Secretary of the Interior must have: to be steward for the natural resources for this generation as well as future generations. I do not know how many future generations we can count on before the Lord returns; whatever it is we have to manage with a skill to leave the resources needed for future generations" (Testimony before the House Interior Committee, February 1981); and "My responsibility is to follow the Scriptures which call upon us to occupy the land until Jesus returns" (*The Washington Post*, May 24, 1981).

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