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The (Religious) Naturalist's Eye: An Introduction to 'Aldo Leopold: Ethical and Spiritual Dimensions'

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Abstract

Aldo Leopold is remembered as a consummate nature writer, a scientist with a philosophical bent, a naturalist informed deeply by his ecological fieldwork, and as an active citizen and conservationist committed to bringing private and public land management into concord. While many of his contemporaries have faded into obscurity, Leopold's work continues to inspire scholars and conservation practitioners to think of social and ecological systems as necessarily integrated. The authors in this special issue probe why this is so by focusing on the ethical, religious, and spiritual roots and branches of Leopold's environmental philosophy and his understandings of land health. I suggest that Leopold's work continues to endure, and receive growing scholarly and popular attention, because he subtly traversed the realm of metaphysics in his writing, creating a challenging dialogue between the sciences and the humanities.

Keywords

Aldo Leopold, religious naturalism, scientific metaphysics, natural history, nature as sacred.

Historian Susan Flader, who wrote the earliest exposition on how Aldo Leopold's scientific thought and ethical insights were deeply related, prefaced her book *Thinking Like a Mountain* (1994 [1974]) by noting the ways in which Leopold's intellectual legacy has ignited a series of developments in other disciplines. Not one to keep his subjects of interest in discrete boxes, the reach of Leopold's influence is impressive:

> Philosophers on several continents debate whether or not Leopold's philosophy is coherent, whether it is rooted in Western or Asian or tribal traditions, whether it is grounded in intrinsic or instrumental values of nature, whether he assigns rights to non-human entities such as animals or rocks, whether he recognizes obligations to ecosystems. These arguments have spilled beyond the bounds of professional philosophy and even theology into debates in the public realm over animal welfare and animal rights, hunting, and preservation of species and ecosystems… Translated into German, Russian, Chinese, Japanese, and other languages, [*A Sand County Almanac*] is stimulating interest in Leopold worldwide. Appreciation of the significance of Leopold's work to the field of environmental education continues unabated… Leopold now regularly appears as a key player in histories of the environmental movement… The implications of Leopold's thinking for issues ranging from standing to zoning and from wilderness to water law are now discussed regularly in the pages of law reviews, and his ideas are also being analyzed in articles and books on economics and public policy. There is increasing interest in Leopold's writings on agriculture and soil conservation… He is also beginning to appear in the literature of sustainable development…and his approaches to land management have been a major influence on the burgeoning new fields of conservation biology and restoration ecology… (1994 [1974]: x-xii).

Quite a legacy. Even this list is incomplete, however, for scholars and conservation practitioners have continued to turn to Leopold for insight and support in diverse ways.[1] One recent example of Leopold's impact on community-based conservation practice is the release of the documentary film *Green Fire: Aldo Leopold and a Land Ethic for Our Time*, which premiered 5 February 2011 (see review by Caputi, this issue).[2] Taking Leopold's words as inspiration—'Nothing so important as an ethic is ever written. It evolves in the minds of the thinking community'—the film moves back and forth between Leopold's life story and the contemporary manifestations of conservation practice that are extending the land ethic to diverse communities. Locations range from an urban garden oasis in the heart of Chicago to the hinterlands of Arizona's White Mountains. Some of the breadth of Leopold's appeal was captured well by Curt Meine, Leopold's biographer and the film's principal narrator, when he remarked: 'it is revealing that [Leopold's] name has been affixed to both a university center for sustainable agriculture (in his native Iowa) and a public wilderness area (in his wife Estella's native New Mexico)' (Meine 2004: 116).

1. For another extensive list of professions and fields that bear Leopold's imprint, see Meine 2004, particularly pp. 162-63.
2. For more information, see http://aldoleopold.org/greenfire/.

The title of the film is worth further comment. If there is one image above others that has seemed to resonate most from Leopold's writing, it is 'green fire' (see Caputi and Van Horn in this issue for extended discussion of this metaphor). The reference for this image comes from one of Leopold's essays, 'Thinking Like a Mountain', in which Leopold encounters the 'green fire' of a mother wolf that he shot, leading to a contrite acknowledgment of the errors in perception that caused him (and others) to disregard the well-being of the larger land community. At least one of the ways in which 'green fire' has achieved further symbolic layers is as a proxy for the conservation movement, and the film explicitly makes this connection. This potent force is thus understood as the animating vitality not only of ecological systems but the wild spirit that connects and enlivens people's commitments to their social and ecological communities.

Appropriately enough, the seeds for this special issue were planted during a month-long summer institute on Leopold's work that also bore the 'green fire' metaphor in its title: 'A Fierce Green Fire at 100: Aldo Leopold and the Roots of Environmental Ethics'.[3] The twenty-five scholars who gathered at this institute were challenged to reflect on how Leopold's ideas could bridge academic disciplines, how his writings could be incorporated into college and university classrooms, and how his methodologies of 'reading the land' could be used as inspiration for field activities. A final outgrowth of the Institute was what would become the topic of this special issue of the *Journal for the Study of Religion, Nature and Culture*: a call to scholars to examine the ethical, religious, and spiritual roots and branches of Leopold's environmental philosophy and his holistic views concerning land health.

Of course, our effort is not the first on this fertile topic.[4] This special issue does, however, delve deeply into areas that have received less

3. The '100' in the title was a reference to the anniversary of Leopold's arrival in the Southwest in 1909 (see Van Horn, this issue). The institute was sponsored by the Arizona State University Institute for Humanities Research and funded by the National Endowment for the Humanities. It was held in Prescott, Arizona, 22 June–17 July 2009. One of the chief goals for participants at the institute (beyond the expansion of research on Leopold) was to incorporate Leopold's work into courses taught across the humanities and sciences curriculum at each scholar's respective school. Recognized Leopold scholars Curt Meine, J. Baird Callicott, Julianne Warren, and Scott Russell Sanders were invited to lead discussions for one of each of the weeks. More information about the Institute and additional resources can be found at http://leopold.asu.edu/home.

4. Readers can reference the many books and articles cited in this issue depending on their area of interest. A brief listing of seminal scholarly works on Leopold,

attention than might be expected, including the continuities between Leopold's brand of religious naturalism and his scientific and philosophical predecessors, the integration of the sciences and the humanities in his thought and practice, and the insights of his ecological ethics in relation to current ethical frameworks.

Leopold frequently described the landscape in terms of its musical qualities.[5] Rivers were 'the tune that waters play on rock, root, and rapid', which were in turn part of a larger, evolutionary symphony that was 'a vast pulsing harmony—its score inscribed on a thousand hills, its notes the lives and deaths of plants and animals, its rhythms spanning the seconds and the centuries' (1989 [1949]: 149). As a writer, Leopold might be regarded as a musician of sorts, inasmuch as he was an adept synthesizer of the 'tunes' of others, translating technical science into a rich vocabulary for various audiences. The articles in this special issue survey the academic wells of inspiration from which Leopold drew and highlight the improvisations and riffs he created as he reworked his compositions for non-scientifically trained audiences.

As Jane Caputi argues in this issue, in many ways Leopold draws on archetypes that stretch into the elemental depths of human experience and consciousness. She uncovers fascinating correspondences between Leopold's work and various religious and alchemical spiritual traditions as well as contemporary ecofeminist philosophies that attempt to reconcile seemingly opposite forces. The key word to her article is 'integrity', and she posits that Leopold may be identified as a modern-day shaman who—by rejecting the conquering-hero myth as an adequate relationship between people and land—became a kind of cultural intercessor and advocate for ecological wholeness. Caputi also asks, given Leopold's guiding quest for integrity and his understanding of an ecological continuum, how he would respond to modern forms of genetic engineering and transhuman projects, which actively seek to supersede 'nature' and transcend human genetic 'limitations'.

In my own contribution, like Caputi, I explore antecedents to Leopold's use of the 'green fire' metaphor, but I am especially concerned with more proximate literary precedents, namely the writing of Henry

however, must begin with Curt Meine's *Aldo Leopold: Life and Work* (1988), which was reissued in 2010 with a new introduction by the author; Julianne Warren's (formerly Newton) *Aldo Leopold's Odyssey* (2006), which is a rewarding, in-depth treatment of the conceptual evolution of Leopold's thinking; and treatments of Leopold's ethical understandings found in J. Baird Callicott's *In Defense of the Land Ethic* (1989) and *Beyond the Land Ethic* (1999).

5. See, for example, 'The Choral Copse' (pp. 53-54), 'Marshland Elegy' (pp. 95-101), and 'Song of the Gavilan' (pp. 149-54) in *A Sand County Almanac* (1989 [1949]).

David Thoreau and Ernest Thompson Seton. To my knowledge, this is the first time the remarkable affinities between these three writers have been explored with reference to 'green fire'. I also move beyond literary precedents, noting the mythic framework of 'Thinking Like a Mountain', and its relationship to Leopold's evolutionary cosmology. The interplay of scientific observation and narrative myth in this well-known essay has had lasting impacts, which I illuminate through the lens of contemporary wolf reintroduction efforts and scientific conceptualizations of the biosphere. I conclude by arguing that powerful narratives, such as Leopold's, may provide a critically important communicative bridge between the sciences and the humanities.

In the various fields of the humanities, Leopold has perhaps made the greatest inroads among philosophers, who have debated in particular his ecological holism and its implications.[6] Interpretations of Leopold's 'land ethic' may have captured the lion's share of attention (at least in environmental ethics anthologies), but all the authors of this special issue would agree that Leopold provides much more than a convenient straw man representing the 'ecological holist perspective'. Three philosophers are contributors to this special issue, and each takes on different aspects of Leopold's thought. Ashley Pryor elaborates on Leopold's indebtedness to Russian synthesist Pyotor Ouspensky who, she believes, has been greatly undervalued among Leopold scholars. In secondary literature on Leopold, Ouspensky is often mentioned in passing, sometimes even dismissed as a non-factor, despite what Pryor claims are clear instances of Leopold borrowings. Underlying the comparison, Pryor argues that Leopold's understanding of nature's *numenon* (the binding connections beyond phenomenal appearances) is a critical window into comprehending the philosophical continuity of his perspectives, his understanding of

6. For a review of the charge of 'ecofascism' in reference to Leopold's favoring the needs of the system (and its processes) over the lives of individual organisms, see Callicott (1999: 59-76) and Meine (2004: 178-81). Among environmental philosophers, Leopold has been hailed as both an ecocentrist, concerned primarily with the intrinsic value of ecological systems (see Callicott 1989, 1999; Rolston 1994; Devall and Sessions 1985; Katz 1997), and as a paradigmatic environmental pragmatist, who was unafraid to appeal to human interests and preferences when working with farmers, ranchers, landowners, and concerned citizens to achieve land health (see Norton 1988, 1991, 1995, 1999; Minteer 2006). It might be said that Leopold, untrained as a philosopher, did not hew to any particular environmental philosophy but was willing to use all the ideological tools at his disposal so long as they remained consistent with a vision of achieving ecological health. Ashley Pryor, in this issue, explores how these different philosophical positions have affected the way in which some aspects of Leopold's work have been interpreted.

love, and how receptivity to the 'more than human' world may have implications for environmental ethics.

Leopold's reception among philosophers has not always been amicable. One persistent criticism among several prominent ecofeminists is that Leopold is too beholden to masculinist cultural ideals, a claim that is most often connected to his lifelong passion for hunting. Kathryn Norlock directly engages this interpretation of Leopold's work. After detailing some of the more notable ecofeminist readings of Leopold, Norlock underscores the ways in which ecofeminists may benefit from Leopold, especially with regard to his emphasis on the experiential dimensions of care and the centrality of relationships to his views. Additionally, Norlock offers her own studied perspective on sifting out what is fundamental to Leopold's ethics from what may be of lesser value to ecofeminists.

Closing out this special issue is J. Baird Callicott's provocative piece regarding Leopold's role in worldview 'remediation'. Callicott has dedicated his career to exploring and championing the ethical implications of Leopold's writings, opening up a robust debate among philosophers, while extending the reach of Leopold's importance to those in many disciplines. Making no small claims in his article, Callicott argues that throughout *A Sand County Almanac* Leopold was consciously engaged in a brilliantly subtle project of evolutionary-ecological worldview revolution—a revolution which is no less striking in its implications than the Copernican shift in astronomy or the Kantian philosophical revolution. For Callicott, the evolutionary-ecological worldview has 'underappreciated religious potential' as a source of aesthetic and spiritual satisfactions and as a conceptual framework befitting tests of tenability—it is a 'science that *is* a kind of poetry'.

The articles in this special issue speak to the breadth of Leopold's thinking and practice. Long before environmental historian William Cronon eviscerated those whom he believed propagated the romantic notion that wilderness was a place humans could only profane by their presence—leading to 'The Great Wilderness Debate' (parts I and II)[7]—Leopold was breaking down the dualities that have often divided conservationists.[8] He often counseled his readers, students, and colleagues to

7. See Callicott and Nelson 1998, and Nelson and Callicott 2008.

8. Curt Meine (2004: 42-62, 89-116) and environmental ethicist and policy scholar Ben Minteer (2006) have exhumed some of the forgotten history of the conservation movement, pointing out that the Muir vs. Pinchot narrative is much more complex when set within the larger Progressive social and political movements that focused on common public goods.

cease thinking in terms that pitted agriculture against wilderness, private landowner against federal government, and emotional attachment against rational management. His professional work and personal engagements became a series of integrations, and he struggled over the course of his life to better link the evolving landscape of his thought to reflect what he saw occurring in the actual landscapes of the Midwest and Wisconsin in particular, but also more broadly in Arizona, New Mexico, northern Mexico and Baja, Germany, and Canada, among other regions.

Perhaps one of Leopold's most admirable qualities was that he was often his own greatest critic. In recent years, this has become more apparent as a vast unpublished corpus of Leopold's writings have become publicly available—first in anthologies, and now in a comprehensive online archive maintained by scholars affiliated with the University of Wisconsin.[9] Familiarity with this material is rewarding, especially in that it reveals the ways in which he constantly challenged himself as a scientist and social commentator.

The wide horizons of Leopold's interests is significant, but this does not sufficiently account for why Leopold's work—unlike some of his contemporaries who were better recognized during and immediately after his lifetime (see Meine 2004: 163-69)—continues to endure as well as generate new interest in such diverse arenas.

* * *

To explain why Leopold's influence has grown so substantially, including among humanities scholars, it is valuable to examine a particular animal encounter he describes in *A Sand County Almanac*—not with a wolf in this case, but with a grebe. The story (from the essay 'Clandeboye', which closes out Part II of *A Sand County Almanac*) captures Leopold's insatiable curiosity, as well as his ability to involve his readers emotionally in moral considerations that are much larger in scope. In it, Leopold describes a place from which most people (even the environmentally minded) find it difficult to derive pleasure: a marsh. After calling attention to the geological sweep of eons evoked by the marsh, which to his mind sets it 'apart, not only in space, but in time', Leopold literally digs in to learn about one of its most elusive denizens, the western grebe,

9. Valuable collections of Leopold's writings (some unpublished or very difficult to find) include: *The River of the Mother of God and Other Essays* (1991), *Aldo Leopold's Southwest* (1995), and *For the Health of the Land: Previously Unpublished Essays and Other Writings* (1999). The digitized archive of all Leopold writings, including his journals and an extensive body of correspondence, can be found at http://digicoll.library.wisc.edu/AldoLeopold/.

whose call 'dominates and unifies the marshland chorus' (1989 [1949]: 158-59, 161). Seeking this diving bird's 'secret message', Leopold follows his curiosity with his whole body: 'One day I buried myself, prone, in the muck of a muskrat house. While my clothes absorbed local color, my eyes absorbed the lore of the marsh' (1989 [1949]: 160).

Leopold's comment, written so matter-of-factly, is perhaps easy for readers to gloss over. But we should not. Here we have Leopold, flat on his belly, nuzzled into the mud and flotsam of a muskrat dwelling, hoping to catch some deeper meaning behind a grebe's activity. The essay ends with an elegiac lament about the loss of marshes, the seeming inability of humans to abide the wild and the tame together, and the passing of the 'music' of grebes, swans, and cranes who say farewell to such places that recall geological ages past. The style—swinging from the very personal particularities of sensorial immersion to the conflict between evolutionary beauty and human blindness—is all Leopold, and for that the essay is likely remembered. But it is Leopold flat in the mud 'absorbing the local color [and] lore' that hints at why so many may find Leopold compelling.

If one of the appeals of Leopold has been the breadth of his interests, then it is equally necessary to point out that this expansive knowledge was contingent on an incredible depth of feeling for and emotional investment in the natural world. By burying himself to learn something more, he literally went past the superficial, in this case in search of the elusive behavioral tics of a mysterious grebe. This may serve as a larger metaphor for his work: Leopold consistently dug beneath superficialities in his willingness to challenge the 'cold potatoes' science of his time (1989 [1949]: 223), in his pointed satire of an educational system that attended to dead facts instead of the living 'personalities' of flora and fauna (1989 [1949]: 18, 73, 223-24), and in his critiques of the inefficiencies of government agencies working at cross-purposes (1991 [1944]; 1989 [1949]: 99-101, 118-19).

His science and practice hearkened back to a time when disciplinary fields were kept lively by the ways in which they informed each other; in short, Leopold embodied the disposition of the naturalist. Charles Elton, a British contemporary of Leopold's, may have gotten the spirit of Leopold's work on the nose when he wrote that 'Ecology is a new name for a very old subject. It simply means scientific natural history' (2001 [1927]: 1; quoted in Meine 1988: 284).[10]

10. For an excellent essay that situates Leopold's work within the tradition of natural history writing, while also commenting on its deviation from and development of this genre, see Tallmadge 1987.

Leopold believed in attention to nature's details. He kept extensive phenological records, filling hand-written journals with the timing of spring flower blooms and birdcalls at twilight. Yet he was not a one-dimensional observer, merely standing back and apart from the land, teasing apart deductions in a laboratory, with an interest only in 'objective' results. For Leopold, the land was alive and humans had a 'vital relation' to it (1989 [1949]: 224); in a word, the land was worthy of love (1989 [1949]: viii-ix). Leopold objected to 'knowing' an animal by simply categorizing its physical characteristics; he was much more interested in 'comprehension of the *living animal* and how it holds its place in the sun' (1938: 4, emphasis added), for 'in birds, as in people, there are things to be known over and above name, sex, and clothes' (1938: 3).

This perspective was evident when Leopold delivered his presidential address to the Wildlife Society in 1940. In this speech, he candidly exposed both a division in the sciences and a hope for what science would become. He began the address by stating that 'we may, without knowing it, be helping to write a new definition of what science is for. We are not scientists. We disqualify ourselves at the outset by professing loyalty to and affection for a thing: wildlife. A scientist in the old sense may have no loyalties except to abstractions, no affections except for his own kind'. Leopold, instead, called for the 'creation and exercise of wonder', concluding that the task was 'to rewrite the objectives of science' to include this driving motive (1991 [1940]: 276-77).

Because we can only care for that with which we share a relationship, and we 'grieve only for what we know' (1989 [1949]: 48), Leopold knew it was critical to inspire people to invest themselves—body and spirit—in the intimacies of the landscape. This was as true for the biologist as it was the farmer, the private landowner, the banker, the attorney, the student, the machinist, and so on.

Captured in his tale of observing a marsh's grebes, as in many other essays, there is a physicality, a sensuousness, to the writing that immerses readers in the quotidian discoveries Leopold made, and further draws us into his uncommon reflections upon these experiences. If, as one writer suggested, Leopold 'questions the deepest values of our civilization and challenges us personally on every page', he also 'never lets his moral and social concerns carry him out of sight of the land itself' (Tallmadge 1987: 115). Indeed, Leopold's criticisms and enthusiasms were imbedded in his understanding and love of the land—inseparable and mutually reinforcing. Conservation biologist Reed Noss perhaps echoes the feelings of many who have found a companion in Leopold:

> My early science teachers had hammered into me that science is value free, nonemotional, amoral—just plain facts. They also stressed that real science is indoor, laboratory science—white lab smocks, test tubes, lots of equations, and worst of all, vivisecting rats and pounding nails through turtles' heads. In rereading *A Sand County Almanac*, I realized that scientists could indeed be naturalists first and foremost. They could talk about such things as beauty, love, and right and wrong. I had believed for a long time that studying natural history offered priceless insights on how to live in harmony with the natural world, but my teachers had nearly convinced me that no relationship exists between fact and value. It took a rereading or two of Leopold to teach me that natural science can help us learn how to live (Noss 2002: 108).

Leopold was a scientist who thought long and hard about the relationship between 'fact and value' and what it meant in terms of 'how to live'. As many of the Journal's readers are no doubt aware, Leopold wrote that one of the problems with promoting a conservation-based land ethic was that 'philosophy and religion have not yet heard of it' (1989 [1949]: 210). Our social 'values', in other words, had not caught up to our earthly 'facts'. As an adept reader of natural and cultural landscapes, Leopold insisted that compulsory laws or economic incentives would not suffice—something more binding and fundamental was needed, which could perhaps be captured under the term 'religion'.

There is much in the articles of this issue that speaks to Leopold's views in this respect. While Leopold was reticent about expressing any particular religious affiliations, he perceived something sacred about the 'odyssey of evolution' (1989 [1949]: 109), as he named it. Perhaps this is what Leopold's daughter, Nina, had in mind when she said of her father that he 'was the most religious person I ever knew' (N. Leopold, personal communication, 9 January 2010), despite his only stepping foot in a church twice during his lifetime (one of those times was for his daughter's wedding). To be sure, there are instances when Leopold incorporates religious anecdotes into his writing, calling especially on the biblical prophets to underscore the moral relation that people should have with land. However, it is his total vision, what might be called a religious naturalism,[11] that brought together his appreciation for geological time, the unfolding of evolutionary processes, and his intense attachment to place, informing his ideas about how land use (and abuse) was a moral responsibility.

11. For a primer on religious naturalism as an alternative to supernaturalistic religions, see Crosby 2007. Bron Taylor (2010: 31-35, 78-80, 210-12) has commented on what he referred to as Leopold's 'naturalistic animism' and 'Gaian naturalism', as well as Leopold's influence on others who hold out hope for a scientifically informed nature religion.

Thus, Leopold sought not just the grebe as a grebe, but grebe as a portal into deep evolutionary history. For him, the grebe was a beautiful bird, rendered mysterious, present to the patient observer; yet it was also a creature of 'secret messages', speaking with much more than 'crick-cricks' (1989 [1949]: 160). Leopold's interpretive lenses were fashioned by the science of ecology; indeed he was 'thinking ecologically…before ecological science had evolved a conceptual framework capable of supporting such thought' (Flader 1994 [1974]: 17), but this also led him to hear a deeper music, humming behind and beyond the grebe's 'crick-crick'.

Leopold may be remembered for many things: as a consummate nature writer, a scientist with a philosophical bent, a naturalist informed deeply by his ecological fieldwork, an active citizen and conservationist committed to bringing private and public land management into concord. Perhaps, however, his most repeated challenge is also the most basic to understanding why his work continues to resonate. He believed that reading the land, understanding the evolutionary drama and the ecological relationships that linked all in a community, was a matter of perception. In this respect, there were no shortcuts to understanding the human place in the natural world; nor could such perception 'be purchased with degrees or dollars' (1989 [1949]: 174). For Leopold, it was 'a good thing for people to get back to nature', but this was not a matter 'of building roads into lovely country, but of building receptivity into the still unlovely human mind' (1989 [1949]: 165, 176-77). In short, Leopold went beyond objective description to ask how the natural world could be comprehended more fully; in doing so, he subtly traversed the realm of metaphysics, calling for a culture that valued land as a social relationship, and thus perceived 'that there is also drama in every bush, if you can see it'. He predicted, 'When enough [people] know this, we need fear no indifference to the welfare of bushes, or birds, or soil, or trees. We shall then have no need of the word conservation, for we shall have the thing itself' (1991 [1939]: 263).

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