See also: Anarchism; Bioregionalism; Bioregionalism and the North American Bioregional Congress; Deep Ecology; Earth First! and the Earth Liberation Front; Radical Environmentalism; Schumacher, E.F.; Social Ecology; Snyder, Gary.

Leibniz, Gottfried Wilhelm (1646-1716)

Leibniz lived in a time of great revolutions. It was a time that brought about the fundamental paradigm shift related to the mechanistic theory of Isaac Newton. Leibniz, likewise, was striving for a scientific and even mechanistic model for interpreting nature, but he combined this attitude in an interesting manner with less deterministic and more organistic explanations. Because Leibniz's system of thought is scattered in many small texts that are not sufficiently edited even today; and because Hegel had dismissed Leibniz's philosophy as arbitrary, haphazard, and incomplete - in fact, it is often said that Hegel's philosophy is the completion of Leibniz's - his thoughts have long been underrated, and it is only today that his ideas are newly appreciated.

At the center of his thinking lies the so-called *philosophy* of monads. The term "monad," which Leibniz most likely took from cabbalist and vitalist Franciscus Mercurius von Helmont and Giordano Bruno, reflects the non-material essence of any living creature: God, the angels and every human's soul, the sensual ability of animals and plants, even microorganisms, are monads. Every monad is singular and different; there are no identical monads. Thus, Leibniz's fundamental idea is not a general one like "spirit" or "matter" but the individual itself. The individual monads are the only inseparable units of life and they follow their own plans. Leibniz says, "The monads do not have windows" (Leibniz 1898: 219) which means that they cannot be influenced from outside. The monads are, in a way, spiritual entities that are capable of developing and acting. What we see in the material world is not reality but mere illusion. The monadic reality lies hidden behind the empirically sensible. But since the monad owns a body, this body is a perfect representation of the hidden entity.

No monad can be distinguished or separated from its bodily appearance; even if the body dies, the monad lives on, at least in a sleeping form. The harmonic and exact relationship between monad and body connects Leibniz's metaphysics and his philosophy of nature. Thus, the Cartesian dualism of res cogitans and res extensa is overcome. Furthermore, the cosmos is conceptualized as a living creature, or, in Leibniz's words, "There is nothing deserted, nothing sterile, nothing dead in the universe" (Leibniz 1898: 257).

Another of Leibniz's conclusions is imperative: according to his theory, space and time do not exist independently of one another. Instead, they are idealized patterns of thought, imagined in order to organize the material world. In contrast to Newton's axiom of deterministic and reliable patterns of space and time, Leibniz thus argues for a philosophical doctrine that became prominent in twentieth century thought under the name "philosophy of life."

Kocku von Stuckrad

Further Reading

Jolley, Nicholas, ed. The Cambridge Companion to Leibniz. Cambridge: Cambridge University Press, 1995.

Leibniz, Gottfried Wilhelm. The Monadology and Other Philosophical Writings. Robert Latta, tr., ed. London: Oxford University Press, 1898.

Rutherford, Donald. Leibniz and the Rational Order of Nature. Cambridge: Cambridge University Press, 1995. Savile, Anthony. Routledge Philosophy Guidebook to Leibniz and Monadology. New York: Routledge, 2000. See also: Perennial Philosophy; Philosophy of Nature.

Leopold, Aldo (1887–1949)

In a 1947 address, "The Ecological Conscience," conservation scientist and writer Aldo Leopold succinctly identified the dilemma facing those who understood the cultural significance of the emerging ecological worldview.

No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. The proof that conservation has not yet touched these foundations of conduct lies in the fact that philosophy, ethics, and religion have not yet heard of it (in Flader and Callicott 1991: 338).

Leopold would soon thereafter incorporate the passage, in modified form, in his landmark essay, "The Land Ethic," the capstone of his posthumously published A Sand County Almanac. "In our attempt to make conservation easy," he would add, "we have made it trivial" (Leopold 1949: 210).

In a post-World War II world harshly awakened to the social and environmental impacts of new technologies, Leopold's statement resonated with clarity. The conservation movement of the early twentieth century was roughly understood to be a response to destructive and inequitable resource-use practices, driven by short-sighted economics and lax (or nonexistent) governmental policies. Looking forward, Leopold identified the need to deepen that movement, to "touch the foundations of conduct." In defining his land ethic Leopold sought to expand conservation's scope, and so preclude its marginalization. For Leopold, conservation entailed more than just smarter resource management. It posed a fundamental challenge. It sought a closer "harmony" between people and nature, informed by science, woven into culture, inspired by ethics and spiritual insight. In the very act of compiling "The Land Ethic," Leopold defined this challenge and broadened the conversation about the ethics of the human–nature relationship.

In the decades after its publication, "The Land Ethic" became a core text and starting point for those concerned with the ethical and spiritual dimensions of conservation and environmentalism. There is irony in the fact. Aldo Leopold was not a philosopher or theologian, and well appreciated his own limitations in posing such essential questions. Trained as a forester, founder of the then-new field of wildlife management, an innovative thinker in land management and conservation planning, Leopold only occasionally ventured into the higher conceptual realms of his work. When he did, however, he brought to the task his vast field experience, scientific understanding, extensive reading, abiding interest in history, and strong personal commitment to land stewardship. Reticent on matters of the spirit, his life work as a conservationist and teacher nonetheless led him to the ultimate expression of "The Land Ethic."

In his extensive published and unpublished corpus, Leopold rarely alluded to his personal religious beliefs. He grew up in Burlington, Iowa, in an ostensibly Lutheran family of German descent, but he was not a churchgoer. His wife, Estella, whom he met while working as a young forester in the American Southwest, was a devout Catholic, but the Church played a minor role in their married life and the lives of their children. How is it, then, that one of the key progenitors of environmental ethics came to develop such acute sensitivity to the moral aspects of conservation?

The biographer can only connect scattered dots: Leopold as a boy hunter along the Mississippi River in the 1890s, absorbing lessons of responsibility and respect for game from his father Carl (whom Leopold later memorialized as "a pioneer in sportsmanship"); Leopold as a student, struck by the statement of a Native American speaker, that "Nature is the gate to the Great Mystery" ("The words are simple enough, but the meaning unfathomable") (Meine 1988: 35); Leopold as a young forester, watching the "green fire" dying in the eyes of a mother wolf that he and his colleagues had just shot, and sensing "something new to me in those eyes – something known only to her and to the mountain" (Leopold 1949: 130).

Late in Leopold's life, his youngest daughter asked him directly about his belief in God.

He replied that he believed there was a mystical supreme power that guided the universe, but this power was not a personalized God. It was more akin to the laws of nature. He thought organized religion was all right for many people, but he did not partake of it himself, having left that behind him a long time ago (in Meine 1988: 506–7).

His son corroborated this view. "I think he . . . was kind of pantheistic. The organization of the universe was enough to take the place of God, if you like . . . The wonders of nature were, of course, objects of admiration and satisfaction to him" (in Meine 1988: 506–7).

Perhaps the closest Leopold came in print to describing his own spiritual stance came in an early essay, "Goose Music." He asked, "What value has wildlife from the standpoint of morals and religion?" His answer referred obliquely to

a boy . . . who was brought up an atheist, [but who] changed his mind when he saw that there were a hundred-odd species of warblers, each bedecked like the rainbow, and each performing yearly sundry thousands of miles of migration about which scientists wrote wisely but did not understand. No "fortuitous concourse of elements" working blindly through any number of millions of years could quite account for why warblers are so beautiful. No mechanistic theory, even bolstered by mutations, has ever quite answered for the colors of the cerulean warbler, or the vespers of the woodthrush, or the swansong, or - goose music. I dare say this boy's convictions would be harder to shake than those of many inductive theologians (Leopold 1953: 171).

Leopold did not identify himself as "this boy"; he did not have to.

Although such expressions surfaced only occasionally in Leopold's writing, this abiding regard for the beauty, diversity, and healthy functioning of the natural world suffused his work as a resource manager, scientist, writer, and teacher over a forty-year professional career. As a product of the Progressive Era conservation movement, he caught the spirit of the times – the connecting of ethics and governmental policy though political reform, the respect for the role of science in the management of resources, the blending of social responsibility and personal commitment. As he advanced in the new U.S. Forest Service, Leopold had his youthful idealism tested and tempered. But he also found that work to be a rich source of insight, along with his broad-ranging literary interests.

By the mid-1920s, Leopold was working out his first extensive considerations of conservation philosophy. He was influenced in particular during these years by the Russian philosopher Pyotr Ouspensky, whose book *Tertium Organum* Leopold specifically drew upon in framing his own emerging ecological worldview. Ouspensky's near-

vitalist notion of a living Earth (" 'Anything indivisible is a living being,' says Ouspensky") (Ouspensky 1920: 201) dovetailed well with Leopold's field-based appreciation of the complex interrelations of the landscape of the American Southwest. Fusing Ouspensky's holism with insights from his own ecological research, Leopold gave expression to his latent biocentrism:

Possibly, in our intuitive perceptions, which may be truer than our science and less impeded by words than our philosophies, we realize the indivisibility of the Earth – its soil, mountains, rivers, forests, climate, plants, and animals, and respect it collectively not only as a useful servant but as a living being, vastly less alive than ourselves in degree, but vastly greater than ourselves in time and space – a being that was old when the morning stars sang together, and when the last of us has been gathered unto his fathers, will still be young (in Flader and Callicott 1991: 95).

Leopold delivered these thoughts in a 1923 manuscript entitled "Some Fundamentals of Conservation in the Southwest." Over the next 25 years he would return to the broader dimensions of conservation philosophy, intermittently but steadily, in a series of published and unpublished essays and addresses. Their titles provide a sense of the progression and extension of his thoughts in these years: "The Conservation Ethic" (1933), "Conservation Economics" (1934), "Land Pathology" (1935), "Engineering and Conservation" (1938), "Conservation Esthetic" (1938), "A Biotic View of Land" (1939), "Ecology and Politics" (1941), "Conservation: In Whole or In Part" (1944), "The Ecological Conscience" (1947). Weaving and reweaving themes involving the interrelated social, economic, political, and cultural aspects of conservation, and demonstrating the practical limits of the dominant utilitarian and anthropocentric approach to conservation, these writings were points along the way toward the synthesis of "The Land Ethic." In these writings, Leopold rarely alluded directly to the religious "foundations of conduct." Only with that final synthesis did he expressly issue his challenge to philosophers and theologians to join the effort.

Even as he was defining and testing his conservation philosophy, Leopold was putting it into practice as a scientist, teacher, policy-maker, and practitioner. Over the last twenty years of his life, he made basic contributions in a number of applied conservation fields. He brought ecological perspectives into the established fields of forestry, agriculture, range management, and soil conservation. He was the preeminent leader in the then-new field of wildlife management. He laid important foundations for the future practice of ecological restoration in both his professional

work at the University of Wisconsin and in his personal commitment on his "sand county" farm. Of the latter he wrote:

On this sand farm in Wisconsin, first worn out and then abandoned by our bigger-and-better society, we try to rebuild, with shovel and axe, what we are losing elsewhere. It is here that we seek – and still find – our meat from God (Leopold 1949: viii).

Following publication of "The Ecological Conscience," Leopold received a response to the essay from an academic colleague, Max Otto, a prominent Unitarian thinker with whom Leopold was acquainted in Madison, Wisconsin, where both lived. Otto's remarks spoke well for a new generation of leaders, from varied faiths, beginning to focus on the same post-war dilemmas that Leopold identified in his essay.

I value . . . a quality in your paper which I can only call *spiritual*. You have a *philosophy of wildlife management* which is itself a philosophy of life . . . I'm sure that your argument is sound, and I wish religious people – *church* people, I mean – could see it to be part of religion to enlist in your cause. I'm afraid most of them do not see life in these terms (in Meine 1988: 500).

In the decades that followed Leopold's death in 1948, more and more "religious people" would come to see "life in these terms" and would enlist in the cause of promoting closer harmony between people and the larger community of life. Into this conversation, Leopold injected insights from the revolutionary new science of ecology, while pointing out in clear terms the essential role that philosophy and ethics had to assume. With the publication of "The Land Ethic" in *A Sand County Almanac*, Leopold provided a bulwark against the trivialization of conservation.

Curt Meine

Further Reading

Callicott, J. Baird. *In Defense of the Land Ethic*. Albany, New York: State University of New York Press, 1989.

Flader, Susan and J. Baird Callicott, eds. *The River of the Mother of God and Other Essays by Aldo Leopold.*Madison, WI: University of Wisconsin Press, 1991.

Leopold, Aldo. Round River: From the Journals of Aldo Leopold. New York: Oxford University Press, 1953.

Leopold, Aldo. A Sand County Almanac and Sketches Here and There. New York: Oxford University Press, 1949.

Meine, Curt. *Aldo Leopold: His Life and Work.* Madison, WI: University of Wisconsin Press, 1988.

Ouspensky, Pyotr. *Tertium Organum: The Third Canon of Thought, a Key to the Enigmas of the World.* Nicholas Bessaraboff and Claude Bragdon, trs. Rochester, NY: Manas Press, 1920.

See also: Biocentric Religion – A Call for; Callicott, Baird; Conservation Biology; Darwin, Charles; Earth First! and the Earth Liberation Front; Environmental Ethics; Gaia; Marshall, Robert; Natural History as Natural Religion; Ouspensky, Pyotr Demianovich; Pantheism; Radical Environmentalism; Restoration Ecology and Ritual; Watson, Paul – and the Sea Shepherd Conservation Society; Wilderness Society.

Levertov, Denise (1923-1997)

Denise Levertov's lifelong concern with the experience of mystery began in childhood. Educated at home, Denise, and her older sister Olga, came of age in an eclectic religious atmosphere. Her father, a Hassidic Jew from Russia, converted to Christianity and immigrated to England to become a priest in the Anglican church. Her mother, raised a Welsh Congregationalist, descended from the Welsh tailor and mystic Angel Jones of Mold.

In 1948, Levertov immigrated to the United States and became a distinctive voice in the tradition of American poetry during the second half of the twentieth century. In the late 1960s, Levertov's active participation in the anti-war movement led to poetry explicitly engaged with the collective awareness of the war in Vietnam. In the 1970s, Levertov struggled to balance the drama of public injustice with an emerging interest in the affinities between her religious and ecological concerns.

Asked what the term "religious" meant to her (in a 1971 interview with William Packard) Levertov pointed to a sense of awe: "The felt presence of some mysterious force, whether it be what one calls beauty, or perhaps just the sense of the unknown" (in Wagner 1990: 19). During the 1980s, in a phase of her career devoted to a meticulous and sophisticated development of organic form, Levertov refigures this force in terms of the elusive but persistent mystery of the Christian Incarnation.

In the final books of poems – *Evening Train* (1992), *Sands from the Well* (1996) and the posthumous *This Great Unknown: Last Poems* (1999) – Levertov's celebration of the nonhuman world is inextricable from the intensity of her religious faith. As she insists in one of her essays from this period, "to witness nature is not simply to observe, to regard, but to do these things in the presence of a god" (Levertov 1992: 249). Levertov works toward a "conscious attentiveness to the non-human" as well as to "a more or less conscious desire to immerse the self in that larger whole" (Levertov 1992: 6). Eschewing the American impulse to recreate the self by returning to its primal

source in nature – a position that, for Levertov, reinforces an inward, individualistic, and exclusive ethos – Levertov seeks mystical surrender. With art understood as an ongoing affirmation of faith in the unknown, Levertov suggests that the creative act of poetry affirms the possibility of *living with* the natural world.

Mark C. Long

Further Reading

Gelpi, Albert, ed. *Denise Levertov: Selected Criticism.* Ann Arbor: University of Michigan Press, 1993.

Levertov, Denise. *The Stream & the Sapphire: Selected Poems on Religious Themes.* New York: New Directions, 1997.

Levertov, Denise. *The Life Around Us: Selected Poems on Nature*. New York: New Directions, 1997.

Levertov, Denise. *New & Selected Essays*. New York: New Directions, 1992.

Sakelliou-Schulz, Liana. Denise Levertov: An Annotated Primary and Secondary Bibliography. New York: Garland, 1989.

Wagner, Linda Welshimer. Critical Essays on Denise Levertov. Boston: Twayne, 1990.

Wagner, Linda Welshimer. *Denise Levertov: In Her Own Province*. New York: New Directions, 1979.

Wagner, Linda Welshimer. *Denise Levertov*. New York: Twayne, 1967.

See also: Christianity (6c4) – Anglicanism; Memoir and Nature Writing; Wonder toward Nature.

Lilburn, Tim (1950–)

Tim Lilburn is a Canadian poet, essayist, and teacher of philosophy. Born into a Protestant working-class family in Regina, Saskatchewan, he was profoundly affected in his early twenties by the anonymous Middle English book of mysticism *The Cloud of Unknowing* and other classics of "negative contemplation." He taught in Nigeria, worked for social-action projects, and became a Jesuit. In the late 1980s he left the Jesuit order, distancing himself from Catholicism but continuing to adapt ideas and terminology from its contemplative texts. He worked as a farm laborer for three years, and later became a teacher of philosophy and literature at St. Peter's College in Saskatchewan.

Colorful, buoyant, wide-ranging from the vernacular and the hyperbolic to the lyrical and the elegiac, the poems in Lilburn's three earlier collections show influences as diverse as Gerard Manley Hopkins and the Beats. In his next three collections, *Moosewood Sandhills* (1994), *To the River* (1999), and *Kill-site* (2003), his exploration of human struggles to interact with the natural world moves into the foreground. As dramatized in *Moosewood*