Peder Anker. *Imperial Ecology: Environmental Order in the British Empire, 1895–1945*. Cambridge, Mass.: Harvard University Press, 2001. vii, 343 pages.

What environmental philosopher has not felt Aldo Leopold's inspiring call to think like a mountain? Doesn't this passage seem to back it up?

> The Mountain is not merely something externally sublime. It . . . is the great ladder of the soul, and in a curious way the source of religion. . . . We may truly say that the highest religion is the Religion of the Mountains. . . . We must practice the religion of the mountain down in the valleys also. This may sound a hard doctrine, but in the end, Nature will cooperate with the soul. (pp. 52–53)

But these words were spoken to an audience of two thousand cheering war veterans already in 1923, by General Jan Christian Smuts, prime minister of South Africa, one of the principal architects of the apartheid system that devastated that nation for more than half a century. What was he doing thinking like a mountain?

Smuts was also a pioneer in botany and ecology, and the inventor of "holistic thinking," a term that has come to be symbolic of a right way to solve our cultural problems, something diametrically opposed to the piecemeal, specialized, or compartmentalized thinking that is supposed to have done all this damage. He used holism, as a philosophy of history, and of life, to justify why apartheid was the only political solution to plan the future of this most complex of African colonial nations. "The whole," wrote Smuts, "is free, while the parts are bound" (p. 71). Humans too move onward and upward through degrees of freedom. (In this way Smuts was far more liberal than his fellow colonial administrators, believing that the natives should one day be as free as the foreigners, but it would take a long time. For this position he was eventually booted out of office.)

Norwegian environmental historian Peder Anker, onetime student and longtime friendly antagonist of Arne Naess, wants to tell the true story of ecology's imperialist heritage. The case of Smuts in South Africa is only the most known of a whole series of examples of how the science of ecology, during the first half of the last century, was funded and flourished primarily as an agent to expand the reach and control of the British Empire. What seems to be a provocative and exciting new way to reveal how everything in the natural world is connected to everything else ends up a powerful tool to scientifically justify exploitation and oppression, all in the name of science and an ultimate goal of fitting in with the natural world, with destiny, with the true and the good.

Unlike previous attempts to demonize political ecology as fascist or totalitarian, like Anna Bramwell's *Ecology in the Twentieth Century*, Anker's book tells a very specific story within the history of science. It is an exact, well-

researched tale of two ecologies, both trying to expand the relevance of this interdisciplinary science by emphasizing both its radical and practical qualities in redefining and remaking nature and the human place within it. On the one side is Smuts, a man viewed in his time as the closest thing to Plato's philosopher-statesman. Who else had written so philosophical a work and also had so much political power? From our vantage his politics seem oppressive and inhuman; yet in his time Smuts was mentioned in the same breath as Whitehead and Bergson, while being a great advocate for world cooperation with both the League of Nations and later the United Nations. Yet he failed to get his own country admitted into the UN Charter because South Africa wouldn't abolish laws of institutional discrimination. Gandhi and W. E. B. DuBois called Smuts a hypocrite, but Anker disagrees, saying instead that his naturalizing of extreme politics is typical of ecologically justified political thinking: "The unity of South Africa proved to enforce difference, and the divine nature Smuts envisioned in *Holism and Evolution* served not to liberate the soul as Spinoza once claimed, but to naturalize segregation and thus legitimize such oppression" (p. 195). Ecological thought tends to de-emphasize the suffering of the individual and think instead of the health and flourishing of the species in an environment, and this tendency may be why it makes for bad politics, exalting the general as the specific fades into the clouds.

On the other side of Anker's story is a group of scientific ecologists he chooses to call the "Oxford school of imperial ecology," including animal ecologists Charles Elton and Julian Huxley, botanist Arthur Tansley (inventor of the word *ecosystem*), and human ecologists such as Alexander Carr-Saunders and even the hugely popular writer H. G. Wells. In their own ways, each served to expand ecology from a particular approach in botany to an essential part of the management strategy of the British empire. Beyond specific advances in biological understanding, Anker argues, ecology became successful primarily through the various attempts to add human beings into the mix. The holists and the Oxford imperialists converged over the great wild colonized continent: "Tansley's ecosystem theory was the product of a heated debate between defenders of holism and mechanism. . . . In South Africa ecological scholars mobilized to defend their patron and philosopher of holism, General Smuts, whereas ecologists associated with Oxford defended the mechanist management approach to nature through the system concept. However, despite their methodological differences both parties agreed that a major survey of Africa was needed to look into the issue" (p. 155).

Edgar Worthington was one of those ecologists sent to conduct this survey. He may be best known as the director of the International Biological Programme, but Anker argues that during his years exploring the rivers of inland Africa, he learned more than anyone else from local fisherman and riparian dwellers how to take what they knew and apply it on a national, if not global scale. Worthington saw a tremendous potential for fish farming and the introduction of new species

into the Lakes Victoria, Edward, and George in Kenya and Uganda. Says Anker, "the whole question of farming the waters was at the heart of ecological research in the inland waters of Africa, with the ecologists as chief ranchers and the colonial government as the landowner. The economy of nature was carefully constructed by the ecologists to serve the human ecology of the colonial power, and in return ecologists gained legitimacy and more research opportunities. In this win-win game both parties expanded their territories; the government tightened its control of natural resources at the expense of local tribes, and the ecologists enlarged their system of global knowledge at the expense of local knowledge" (p. 213).

Julian Huxley became the first director of UNESCO, and from this vantage tried to curiously pair scientific paternalism with the large scale planning of democracy as part of some vast human ecology. While arguing forcefully for democracy, freedom of speech, and human rights, he at the same time thought the redesign of the post-World War II world should be left to scientists who objectively knew what was best for nature and the planet as a whole. How do these potentially antagonistic positions go together? This is the problem any kind of political vision based on any science, not only ecology, has to wrestle with. As is well known to environmental philosophers, Huxley hired Arne Naess to investigate the semantic meaning of democracy, and when Naess concluded that the word was being used by just about all political sides at the time to stand for almost any kind of government, his report was quietly hushed under the table, and Huxley's standing at the agency became in jeopardy.

What is the overall lesson of Anker's meticulous study for environmental philosophy? He summarizes for us: "The widely accepted distinction between managerial and Arcadian views of nature has been impossible to locate in British and South African ecological research. The often-used distinction between conservation and preservation traditions in human relations to nature is historically flawed. More important, scholars of environmental ethics defending biocentric and holistic deep ecological philosophy may find the history of early South African ecological thinking more than challenging. Some of the most sophisticated defenders of a policy of racial segregation were philosophers of deep ecology and human ecologists" (p. 241).

Anker warns us that subjugating human will and difference to some external whole, some nature that determines all that we do, is "close to what Hannah Arendt argues to be the very precondition for radical evil" (p. 242). When you start to explain human behavior in terms of animal behavior, "justice (in Tansley's terms) becomes an issue of social balances of energy within human herds. . . . Religion and contemplation are simply mind-energy gone astray. . . . Fine arts and design become instead (in the views of Huxley) tools for engineering an environment with an efficient flow of energy" (p. 243).

Now, of course, what we have to ask here is this: is something about ecology *inherently* imperialistic, or is it yet another scientific approach whose influ-

ence was extended by allying with the political views of whomever is in power, those controlling the purse strings that put ideas to practical uses? Anker seems to say yes, ecology is inherently imperialistic when it is changed into politics. I would say, not quite. Instead, ecology, or perhaps all academic disciplines, are inherently *politically naïve* when well-meaning scientists set out to change the world without learning the new tools of the outside world. E. O. Wilson writes in *Consilience* of all human culture being subservient to biology, thereby pushing his own discipline to the top of the intellectual totem pole. Historian William Cronon spoke naively on a preference for his backyard over the wilderness, and he quickly saw his ideas taken up by right-wing enemies of wildlands preservation.

Those who wish to use ecology and philosophy today for political purposes should hopefully learn from the mistakes of these early environmental apologists for the British Empire. When science is tied to politics, it should never only toe the party line to get more funding and influence. Anker tells a fine and cautionary tale, but he leaves it for us to determine the significance of it all, and to muster the best response. Any conservation biologist who wishes to speak on behalf of nature today had best step outside her discipline a bit to learn something about human aspirations and desires, from the individual through the group on up to the whole, and realize that no one discipline is enough to solve the conundra of the present, globalized world. We all have our different sides on this conflict, and the many positions should never be quickly conflated into one. There is no easy answer, and no scientist should hope to suddenly become a politician without learning a whole new set of rules.

Ecology, if it is to have real political relevance, cannot be reduced to a set of simple slogans that turn us all into unknowing participants in a generalized, simplistic game. Just look at any piece of human history: individuals have done so much to change the world by doing just what *isn't* predicted of them. That's why we can never be all reduced to biology, and why ecological politics often become so lamentable. Because we live in a world of contentious individuals, and you never know what any one of us is going to think of next. And next time you feel compelled to think like a mountain, remember that notion can be bent to mean almost anything at all. Make sure you don't fall off. It can be a very long way down.

David Rothenberg*

* Department of Humanities and Social Sciences, New Jersey Institute of Technology, University Heights, Newark, NJ 07102-1982; email: terranova@highlands.com.