Iosology in the light of the revolution that is exemplified in the phrase “thinking ecologically.” As argued by the pioneer ecological thinker, Murray Bookchin, ecology is a critical and revolutionary way of thinking because it is an integrative and reconstructive science. Putting life and living processes back together after a few centuries of dominant reductionist thinking is no easy task, yet many in this anthology see such a reconstructive turn as core to ecophilosophy in the 21st century.

The task of putting Humpty Dumpty back together again has new momentum given the seriousness of the issues of global warming and consequent climate change and the large numbers of indicators showing us signs of ecosystem ill health. Yet, as many of the contributors in the anthology point out, we are not well equipped with the right conceptual tools to even think clearly about these vital issues. Core themes of the anthology concern the big questions of what is the environment, how do we via science and philosophy best think about it and what constitutes a good human relationship to it? However, even these questions are predicated on the assumption that “the environment” is somehow “other” and is “not us.” The language of philosophy and much science is still dominated by the “us-it” divide. Such thinking indicates that reductionism still pervades philosophy and that interconnections between the elements of living systems, including humans, are still poorly understood.

My main criticism of the anthology is that the contributors miss a good opportunity to use new knowledge in ecology to obtain greater unity in the diverse topics discussed. Take, for example, the relatively recent discovery that forest ecosystems are both organized and symbiotically supported by underground networks (mycelium) of mycorrhizal fungi. Cuttting-edge research even suggests that mycelium also act as communication conduits for the trees in complex networks and allow “mother trees” to coordinate the distribution of nutrients and water and, hence, maximize the health of the total system. To acknowledge the importance of the indivisibility of “the environment,” philosophy needs to take a foundational symbiotic and ecocollaborative view of life. Only when we fully appreciate what Rachel Carson and Aldo Leopold tried to tell us—that the environment is in us and we are in the environment—will environmental problems be properly understood by philosophy and good value and policy responses follow.

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Philosophy of Pseudoscience: Reconsidering the Demarcation Problem


In 1983, Larry Laudan published an influential paper called “The Demise of the Demarcation Problem” (Boston Studies in the Philosophy of Science 76:111–127). That paper has convinced many of us philosophers of science over the years that Karl Popper’s project of demarcating science from pseudoscience was ill conceived. Of course, pseudoscience has not gone anywhere. We still have to contend with all sorts of pseudoscience and science denial, from intelligent design theory to the antivaccine movement. It seems like a mistake for philosophers of science to abdicate their responsibility to help diagnose and treat these and other examples of popular resistance to science. So this volume is well motivated. It would have benefitted, however, from the inclusion of someone representing and updating Laudan’s antidemarcationist perspective.

The book contains 23 contributions in addition to an introduction by the editors. Most of the papers are accessible enough for use in an undergraduate philosophy of science course. Many of the papers, on topics ranging from the cognitive psychology of pseudoscience to the status of claims about the supernatural, are quite helpful. I am less sure about some of the papers that develop critical responses to Laudan.

At times, it seems like the contributors are talking past Laudan. They make a show of disagreeing with him, but end up granting some of his main points. For instance, Maarten Boudry distinguishes territorial demarcation from normative demarcation. He concedes that Laudan was right to think that territorial demarcation will not work, which seems to me like giving away the game—was that not Laudan’s whole point? Boudry then argues that the normative demarcation project is still alive and needed. According to Boudry, “normative demarcation adjudicates between theories or practices we should rationally accept and those to which we should not grant any credence” (p. 81). But what does normative demarcation, in this sense, really have to do with the distinction between science and pseudoscience? Take any example of a recently disconfirmed scientific theory. By definition, that will be a theory “to which we should not grant any credence.” But the fact that recently acquired evidence counts against it does not make it pseudoscience.
In his contribution, Martin Mahner tries to explain "why demarcation is desirable" by giving a list of motivating questions. For example: "Should public health insurances cover magical cures like homeopathy or Therapeutic Touch?" (p. 35). That sort of question is, however, easily answered in the negative without invoking the concept of pseudoscience at all. Public health insurance should only pay for treatments whose safety and efficacy are well supported by the evidence. That evidentialist principle would also apply to scientific treatments that have not yet been tested.

Some of the papers in this volume do show, however, that it is possible to do some interesting theorizing about science and pseudoscience without worrying so much about reviving the Popperian demarcation problem. Noretta Koertge’s discussion of attempts by outsiders to mimic the social institutions marcation problem. Noretta Koertge's discussion of worrying so much about reviving the Popperian de-
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FROM A “RACE OF MASTERS” TO A “MASTER RACE”: 1948 TO 1848.


This book presents a number of difficult features. It is privately printed. The author’s name is a pen name. The history is done like an archaeological dig, going from the Nuremberg trials to the issuing of the Communist Manifesto. It also cannot be read from back to front because of its cross-references. The font for headings and subheadings is stylistically idiosyncratic making it distracting to read. The narrative is that of a PhD thesis, with massive amounts of quotes but no formal bibliography of the cited works. On the website, Samaan describes himself as an architect, designer, mechanic, artist, photographer, and student of pre-Columbian architecture in Latin America. He was born in El Salvador, but is now an American citizen with mixed Palestinian-Christian and Hispanic ances-

The intent of Samaan’s book is to trace the origins of the Holocaust. He argues that it arose largely from mid-19th century ideas of progress, social engineering, Utopian thinking, and the loss of “laissez-faire democracy” (he prefers that term to laissez-faire capitalism). Much of what he presents is helpful as a reference for those who contributed to racism, degeneracy theory, scientific racism, elitism, class warfare, colonialism, and the medical role in promoting euthanasia, sterilization, and classification of human behavioral im-

perfection. I appreciated his attempts to reveal the contradictory work of many icons of progress. Margaret Sanger’s racism against impoverished African Americans and her embrace of eugenic sterilization is stressed. I also appreciated his argument that the major culprits (the ideologue scientists and physicians) of Nazi war crimes were not punished, but their willing underlings who carried out their murderous ideas were punished. He believes we treat theoreticians too gently for the crimes they instigate others to carry out. There are other nuggets scattered throughout the book. But there are also many questionable associations he presents. Samaan makes Charles Darwin a target of his assessment of the origins of scientific racism and downplays Darwin’s abhorrence of slavery that led to a rupture with Captain FitzRoy on the Beagle. I felt at times he faults those in the past for not having Prometheus foresight to see things through the same Libertarian filter he uses to evaluate the good and bad in applied science. The manuscript would have benefitted from a traditional peer review by outside experts before publishing. Whether one agrees or disagrees with Samaan’s interpretations, it is the most detailed account that has appeared so far of the sources to explore on the relations of the Holocaust, the eugenics movement, and degeneracy theory.

Before 1934, American and British eugenics welcomed Hitler’s movement to create a eugenic state in Germany and Samaan provides ample evidence from Harry Laughlin’s correspondence in the Tru-
man State University archives that showed these supportive efforts. He also shows how Laughlin and race hygiene eugenicists in Germany solicited financial support from Rockefeller, Carnegie, and other philanthropic foundations. The Eugenics Record Office at Cold Spring Harbor did not shift its embrace of Hitler and was forced to close in 1934, but its efforts to promote compulsory sterilization and enforce restrictive immigration continued until the end of World War II and the revelations of the death camps in Nazi-held terri-
tories. One of the persons singled out as an unintended contributor to the Holocaust is Edward Bellamy, whose 1888 Utopian novel, Looking Backward, Samaan believes led to the Progressive movement of Teddy Roosevelt and Fabian Socialism in Great Britain. He also believes it was the source for National Socialism, the movement Hitler took over in the 1920s. Many historians would question Samaan’s belief that something like Ayn Rand’s (not Spencer’s) version of libertarianism would have prevented the Holocaust. The two “progressive” movements stemming from Bellamy’s novel, he argues, made the rise of Hitler and the Holocaust possible. I found the argument something