

Ricardo Rozzi, F. Stuart Chapin III, J. Baird Callicott, S.T.A. Pickett, Mary E. Power, Juan J. Armesto and Roy H. May, Jr. (eds).

Earth Stewardship: Linking Ecology and Ethics in Theory and Practice

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This volume includes some twenty-nine chapters by seventy two authors, not counting a brief forward by Peter Raven. Topics range from historical (J. Baird Callicott) and political (Eugene Hargrove) reflections on the discipline and practice of ecology to surveys on the perceived value of arts and humanities for Long Term Ecological Research (LTER) projects (Lissy Goralnik and three coauthors). In between there are multi-authored manifestos articulating the need for both broadening and better integrating values-oriented research into the study and preservation of threatened habitats, and case studies on projects to engage non-scientists in conservation and restoration efforts. The number and breadth of these contributions makes the volume as a whole virtually unreviewable in the traditional sense. What is more, the use of chapter abstracts and Springer's strategy for making their book chapters accessible to digital search engines renders any attempt to provide a comprehensive overview of these diverse efforts unnecessary. Readers with specific topical interests have probably already found chapters from this book popping up in Google Scholar searches.

As such, I will concentrate my review on two topics that surface in subsets of the volume's chapters. The first is simply the effort to better integrate arts and humanities scholarship into ecological engagements with stakeholders and practitioners. The second is the Latin American voice that can be heard in many of the chapters. The integrative aims of the book's editors are declared in the book's introduction. First is a call to action: 'Earth stewardship calls ecologists to engage not only in the production of knowledge, but also in public discourse, as well as in decision making, education and governance' (p. 2). The chapter goes on to note that the existing state of ecology suffers from over-concentration on geographical areas in the Euro-American sphere of influence, on the one hand, and a neglect of epistemological, political and ethical scholarship at LTERs, on the other. The participation of many distinguished ecological scientists both as editors and as contributors to other chapters signals the seriousness with which this overall mission is taken. Some chapters (such as Ben Li, Terry Parr and Ricardo Rozzi's quantitative analysis of geographic gaps in LTER sites) document the factual claims behind the mission, while chapters that list Laura Ogden, Stuart Chapin, Mary Evelyn Tucker or Peter Taylor (among others) as the respective lead author articulate personal or institutional commitments to rectify these oversights.

These are important developments, and statements of intention or good will are worth our attention even when they do not go very far either in articulating the challenges that must be overcome to execute these good deeds, or in giving us models and methods for doing so. In fact, however, many chapter authors *do* offer quite substantive analyses. Charles Redman and Thad Miller call our attention to applied ecology's tendency to overlook the role of technological infrastructure (including, for example, communication technology) in their studies of how human activity is mobilised both for and against conservation initiatives. Manuel Maass and Miguel Equihua draw upon the philosophical methods of Husserlian phenomenology to propose a method for achieving truly trans-disciplinary research on 'socioecosystems'. The approach calls for partnerships among co-producers of knowledge that would span both traditionally academic institutions (such as universities and the existing LTERs) and politically engaged citizen activists, as well as people whose livelihood and daily activity brings them into immediate contact with the more-than-human world. Their approach is further developed by Jorge F. Aguirre Sala, who articulates the need for a hermeneutic appreciation of multiple perspectives on both nature and knowledge processes, while also endorsing the way that imperatives for action demand that we embrace our own perspective while respecting the perspectives of others.

These abstract and somewhat philosophical chapters are brought down to earth (both literally and figuratively) by numerous chapters that discuss initiatives taking place across Latin America. Some take a more historical approach – a study of two environmental martyrs, Chico Mendez and Jose Lutzenberg, for example. Others discuss contemporary projects: for example, Flávio Berchez and his coauthors discuss efforts to conserve marine protected areas in Latin America, including an underwater trail project developed by the University of São Paulo. I was personally most struck by the way in which this work from Latin America challenges epistemological presumptions that are usually taken for granted in Western science. These themes are most evident in chapters by Fausto Sarmiento, Vicenta Mamani-Bernabé and Roy May and by the apparent guiding hand behind this entire volume, Ricardo Rozzi himself. Either directly or implicitly, these chapters draw upon the decolonial methods of Rodolfo Kusch (1922–1979), an Argentinian philosopher whose work was often framed in terms of the difficulties that a European-educated intellectual (himself) has in the encounter with indigeneity.

Kusch's writings, most of which have yet to be translated into English, incorporate quasi-ethnographic fieldwork that he did with Latin American peasants, often farmers, who retained elements of Aymara ethos and worldview even as they had nominally been assimilated into the dominant Spanish or Portuguese language cultures and the Catholic church. Kusch's philosophical theme stressed the tension between the Aymara experience of *estar* (literally, 'to be') and the notion of being that undergirds the European worldview. The latter is (for Kusch) articulated through the existence of material things or biophysical entities, though Kusch was also engaged with the phenomenological tradition that contrasts this sense of being-in-itself with the projective sense of beings (e.g. people) who subsist not as mere things but as being *for* themselves and *for* others. He spoke of his own sense of personal being as one that would only

be completed in some future state of affairs, for example. The *estar* that Kusch sensed through his encounters with the ‘popular thinking’ of the Aymara was not plagued by such incompleteness. They were at one with the things in their world, which were experienced as living presences.

The thrust of chapters from *Earth Stewardship* that stress engagement with the mytho-poetic consciousness of the Aymara is to imply that this unified sense of being *within* an environment produces a true stewardship ethos, and one that is far more potent for preserving the integrity of ecosystem processes than anything Western philosophy (much less economics) has been able to produce. The authors listed above each in their own way suggest our need to learn from this way of being envired, both as a theoretical project and as a practical approach for generating stewardship practices that will be required to heal a broken world. While I (like Kusch, perhaps) am too thoroughly enculturated by Western science and philosophy to embrace this message without ambivalence, I found the collective impact of these chapters (buttressed by the aforementioned links to phenomenology) quite profound. I did not sense that other contributors expressing Western perspectives on ecology, environmental ethics and religious values had quite picked up on the radical nature of the shift in consciousness that the Latin American authors seemed to be calling for. All the better, perhaps, for as Aguirre Sala advises, we are not likely to learn much at all if we cannot fully embrace our own perspective.

In short, though the diversity of topics in this collection is mind-boggling, a cover-to-cover read through might well prove stimulating for many readers of *Environmental Values*. The individual chapters will be found through electronic databases and have value for those with relevant research activities. I cannot imagine that any serious research library will want to be without access to this collection.

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