## *Environmental Culture: The Ecological Crisis of Reason*

**By Val Plumwood**
**New York: Routledge, 2002**
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Many readers of *Human Ecology Review* are no doubt familiar with Val Plumwood's 1994 book *Feminism and the Mastery of Nature* (hereafter: *FMN*). In this earlier work, Plumwood attempted a grand historical analysis of Western thought. Often cited as a foundational "ecofeminist" text, *FMN* traces the dualisms that undergird Western thought (e.g., man/woman, mind/body, culture/nature). Such dualisms, Plumwood argues, serve to validate and buttress the various "master" identities that rely upon the subjugation and exploitation of women, people of color, underclasses, nature, etc. Writing *FMN*, Plumwood effectively anticipated the now-ubiquitous calls to move beyond dualistic thinking.

In her latest book, 2002's *Environmental Culture: The ecological crisis of reason* (hereafter: *EC*), Plumwood takes up where *FMN* left off. In *EC*, she begins the arduous task of "remaking the ... master story of colonization" (*FMN*, p. 195) by examining the connections between contemporary Western culture and ecological destruction, as well as sketching the contours of a revisionist mode of ecological thought and practice. The subjects of her critique are legion. Bio-engineers, economists, scientists, environmental activists, and self-identified "deep ecologists" are all treated with the same careful and relentless scrutiny.

In the introductory chapter of *EC*, Plumwood lays out two challenges to be met if a transition to an environmental culture is to be successful. The first of these is "the (re)situating of the human in ecological terms" (p. 8). The second challenge is "the (re)situating of the non-human in ethical terms" (p. 8). What she is proposing, then, is a *human ecology* coupled with a non-anthropocentric ecological ethics. The ambitious breadth of the book should by now be quite clear. Few academics have attempted the scope of *EC* in an entire career, much less within one book. It is perhaps the scope of the book that makes it somewhat difficult to digest when read cover-to-cover. This is understandable, however, as it would be all but impossible to finalize the tasks set forth in *EC* in less than three hundred pages (or three thousand, for that matter). That being said, each individual section of the book is tight, effective, and convincing, and as such *EC* should make an excellent reference book and jumping-off point for students and academics in a variety of disciplines.

As the focus of the book is the ecological crisis of contemporary Western society, one primary target of critique is (quite logically) science. For Plumwood, too much science has become a "form of monological and dualistic thinking, [where scientists] set themselves radically apart from objects of knowledge in a way that refuses objects elements of commonality, mind, or intentionality" (p. 45). Under this rationalist gaze, nature becomes not just objectified, wholly knowable, and technologically manageable, but literally replicable and replaceable as well. Such thinking is inherently anti-ecological, overlooking (or ignoring) humanity's embeddedness in and interconnectedness with non-human nature. While this may be preaching to the congregation for many ecologists, Plumwood sees the dualistic model of science as actually increasingly its reach. With, for example, four out of five scientists now employed by corporations, science becomes less about *understanding* and more about *manipulating*. Knowledge acquisition is increasingly justified solely along *instrumental* concerns.

Plumwood's writing is guided by commitments to feminist and social justice advocacy. Corporate science holds little concern for issues of gender, class, or racial equality. That much will surprise no one. But the regressive or even repressive effects of science are not solely the products of, say, the genetic engineers employed by Monsanto or Dupont. First world environmental scientists — the self-appointed "EcoGuardians" of the earth (p. 68) — are singled out for critique as well. Plumwood states that these "EcoGuardians" are often "unable to recognize their own knowledge as politically situated, hence failing to recognize the need to make it socially inclusive ... and actively engaged with its boundaries and exclusions" (p. 68). This detached, privileged position allows these scientists to completely miss the fact that their knowledge is produced within — and often reinforces — inegalitarian social structures. A properly "ecological rationality" would guide a more self-critical science, fully aware of and sensitive to its active role *within* (that is, *not* detached from) society.

Plumwood's critique goes well beyond social justice advocacy, however. Her concern for marginalized human social groups is mirrored by an equally sincere concern for non-human nature. In *EC*, Plumwood develops an exhaustive and sophisticated critique of anthropocentrism. In the same manner that radically rationalistic science can dismiss or ignore the concerns of marginalized human groups (seeing itself as privileged, as *different*), the "reason-centered" Western worldview fully bifurcates the world into separate realms of active, knowing 'subjects' and passive, knowable 'objects.' The result is a "radical discontinuity" between humans (as the sole possessors of reason) and non-human nature (p. 100).

Plumwood lays out four ways in which this dualistic human-centeredness is inherently anti-ecological and radical-

ly hubristic. Firstly, it justifies an ethics that fails to cross the "human-species boundary" (p. 105). All nature is homogenous in its lack of consciousness and therefore not subject to the ethical considerations that guide human relationships. Secondly, the human dependency upon nature is "backgrounded" or denied. Ecology becomes a mere "technological problem to be overcome" (p. 105), and a false sense of human autonomy thus develops. Thirdly, nature — which can only be defined by what it lacks in its non-humanness — becomes a purely negative space (lacking culture, lacking cultivation, lacking "improvements," etc.). Finally, nature's independent agency is erased, and its value can only be assessed where it coincides with human interests. These "blindspots of centrism and human self-enclosure" must be overcome if there is to be any hope "for both our own and nature's survival in an age of ecological limits" (p. 122).

The proposal set forth in this book is, in a word, radical. Plumwood is calling for nothing short of a transformation of our worldview. It could, of course, be argued that the possibility of the large-scale adoption of a "dialogical interspecies ethics" (p. 166-195) is fantastical when considering current political trends. It could likewise be objected that what is really needed is a more pragmatic approach to solving ecological problems, one sensitive to what works and what doesn't, one flexible enough to mold itself to changing social and political climates. Such a fidelity to practicalism is precisely, I believe, what *most* environmental scientists and advocates (at least in the "First World") practice. This is as understandable as it is laudable, as it is in countless, everyday on-the-ground battles that species are being saved from extinction and watersheds being slated for protection. That being said, only the most diehard optimist would claim that we in the First World are living in an era of widespread ecological awareness and sustainability.

As many small battles are won, broader societal trends toward privatization and funding cuts in science and education are combining to accelerate Western society's plunge into a state of increasing ecological degradation. It is toward these pervasive trends — and the myriad everyday acts that reinforce them — that Plumwood aims her critique. While no scientist can simply go to work tomorrow and begin practicing the holistic, enlightened ecologically rational science Plumwood is proposing, every scientist, activist, or academic *can* benefit from examining the ways in which ideologies and everyday practices contribute to ecological problems. *Environmental Culture* goes a long way toward mapping out these connections, helping illuminate the ecological nature of all human social existence. In an age of small battles and stifled politics, Plumwood's first-rate, grand scale theorizing is quite refreshing, and more timely than ever.

## *Continuities in Sociological Human Ecology*

**Edited by Michael Micklin and Dudley L. Poston, Jr.**
**New York: Plenum Press, 1998**
**373 pages, cloth**
**ISBN: 0-306-45610-9**

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*Continuities in Sociological Human Ecology* is an edited collection of 16 chapters that are tied together because the contributors rely on ideas that were developed or elaborated upon by Amos Hawley. Because it is difficult to make general statements about edited volumes, I will spend most of this review describing the book's contents. The book consists of two parts. Part I includes nine essays dealing with conceptual and theoretical issues. Part II includes seven examples of empirical research. Some, but not all, of the empirical chapters in Part II examine theoretical issues raised in Part I.

Part I begins with an essay by Hawley himself on the relations among population, environment, and development. His primary concern is with disequilibrium in societies as they move along a path of development. He notes that in human societies change can be cumulative and never has to arrive at an equilibrium state. Chapter 2, by Dudley Poston and Parker Frisbie, sets out the general orientation of sociological human ecology and describes how it can apply to aggregate studies of migration. In Chapter 3, Michael Micklin and David Sly provide an elaboration of the ecological complex (POET). They are particularly interested in identifying the mechanisms underlying ecological change. Paul Eberts, in chapter 4, links general systems theory and policy analysis with the ecological perspective. In chapter 5, Charles Bidwell and John Kasarda discuss an ecological theory of organizational structure. In chapter 6, Frisbie and Abdullah Al-Khalifah examine the contributions of human ecology to cross-national research. Steve Murdock and Don Albrecht examine the development of agriculture in the United States from an ecological perspective in chapter 7. Mark Fossett and Cynthia Cready apply an ecological perspective to the study of ethnic and racial inequality in chapter 8. And, in chapter 9 David Brown argues that ecological principles should be applied to spatial distribution policies.

Part II includes three chapters that examine human ecological principles in non-Western societies, following up on Frisbie and Al-Khalifa's previous theoretical chapter on the application of human ecology to cross-national research. In

chapter 10, Frisbie and Al-Khalifa examine the division of labor in Saudi Arabia. They show that in this society such variables as population size, urbanization, development and transportation/communication employment are related as expected to the division of labor which, in turn, is related to administrative intensity (proportion of the labor force in professional, managerial and clerical occupations). In chapter 11, Michael Mao examines the division of labor in the People's Republic of China. He shows that in China variables such as social density (proportion of the labor force in transportation and communication industries) and urbanization are related to the division of labor in the expected way. Thus, both chapters demonstrate that factors that influence the division of labor in the United States also influence the division of labor in societies with different cultures and economic systems. Poston, Micklin, and Jing Shu examine the extent to which minority groups in China are socially and spatially differentiated in relation to the majority Han population in chapter 14. They find a positive correlation between the extent to which a minority group is spatially segregated from the Han majority and the extent to which a minority group and the Han majority are differentially distributed into education, occupation, and age groups. This shows that the link between physical and social distance that exists in the U.S. also exists elsewhere.

Chapters 12 and 13 follow up on previous chapters on migration and population distribution. In chapter 12 Thomas Hirschl, Poston and Frisbie examine the effects of sustenance activities on migration and in chapter 13 Sean-Shong Hwang and Murdock examine an ecological model of suburbanization. Hirschl, Poston and Frisbie find that variation in net migration among counties in New York state is more responsive to differences in private sustenance organization than to differences in public sustenance organization (Social Security participation and Food Stamp participation). Not surprisingly, net migration is negatively related to Food Stamp participation; people tend to move away from, not to, places where people have low incomes. Hwang and Murdock find that "image" variables (density, age of housing stock, age of suburb, and percent owner-occupied) are better predictors of population growth in Texas suburbs than are structural characteristics. Predictably, suburbs that were newest and growing fastest continued to experience the greatest relative population growth.

In chapter 15, Murdock and Albrecht follow up on their previous chapter by applying an ecological perspective to the study of constraints and problems in U.S. agriculture. In the first part of the chapter they find that counties with net in-migration tend to be those that specialize in sustenance activities that are internationally competitive. In the second part they demonstrate that the introduction of "commensalistic technology" (increases in efficiency of production) tends to reduce average sales per farm while "symbiotic technology" (provides access to new or previously unavailable resources) increase farm population, the number of farms, and average sales per farm. Finally, in chapter 16, Fossett, Therese Seibert and Cready follow up on Fossett and Cready's previous chapter by examining labor force participation rates of African American men. They find that changes in the structure of labor demand, most notably shifts in the occupational structure toward white-collar occupations with higher education requirements, have played an important role in the declining labor force participation of African American men in the South.

The chapters in this book mostly are applications of tried and true ecological principles to new problems or new settings: different countries, different groups of people, different units of analysis, different dimensions of sustenance organization, different technologies, etc. They do not represent substantial departures from pre-existing theory or research. To describe this book in ecological jargon, it represents boundary expansion but not cumulative structural change.

There are two matters about which potential readers should be aware. One, since so many of the chapters deal in some way with sustenance organization, social differentiation, the division of labor, and the founding fathers of human ecology, the discussion quickly grows repetitious and tedious. Two, the literature cited and the research presented in this book are seriously dated. Although the book was published in 1998, most of the chapters cite only a few, if any, works published after 1990 and all of the research is based on data from the 1980s or before. I got the impression that most of the chapters were written in the very early 1990s or late 1980s. Any reader expecting to get a cutting edge picture of human ecology from this book will be disappointed.

## *Briefly Noted*

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### *Democracy in Practice: Public Participation in Environmental Decisions*

*By Thomas C. Beierle and Jerry Cayford*
*Washington, D.C: Resources for the Future Press, 2002*
*ISBN: 1-891853-54-6*

Beierle and Cayford seek to shed light on the often misunderstood process of public discourse and environmental decision making in the public arena. Focusing their sample

on decisions taking place in the United States within the last thirty years, they examine records from various stages and viewpoints of the process. They organize much of their analysis around questions. For example, what type of issue is at stake (e.g. local vs. national policy)? What are the processes (e.g. selection of participants, consensus building strategies, etc.) involved? What are the institutional settings (e.g. in the case of government involvement, what is the lead agency, what is the level of government involvement)? They conclude that agencies could do a better job of including voices of the community, but to do so would require more resources and staffing. The public would do well to incorporate more technical information into their thinking and discourse. The authors also conclude that involving the public in environmental decision making tends to help alleviate conflict and build the public trust.

### *Resource Rebels: Native Challenges to Mining and Oil Corporations*

*By Al Gedicks*
*Cambridge, MA: South End Press, 2001*
*ISBN: 0-89608-640-2*

With an increasingly globalized energy market, strategies of native resistance to extractive industries have adapted in a variety of ways. Al Gedicks examines some of those adaptive strategies and movements, including the patterning of discourse around the symbolism of anti-mining, human rights, and sustainability. He also examines counter-rhetorical strategies used by mining companies. Gedicks concludes with a chapter on "The Military, Trade and Strategies for Sustainability," in which he makes a number of generalizations: the isomorphism that is often assumed between nations and states (as in the battle lines typically being drawn between "nation-states") often tends to underplay the importance and voice of a minority people within a given state. This is particularly problematic when resources are at stake that are part of native or tribal lands.

### *Materials Matter: Toward a Sustainable Materials Policy*

*By Kenneth Geiser*
*Cambridge, MA: MIT Press, 2001*
*ISBN: 0-262-57148-X*

Kenneth Geiser goes beyond the "reduce, reuse, recycle" discussion with an engaging look at product design. Rather than focusing on the waste end of a product lifecycle, he focuses on the planning and design aspect of product lifecycles. The deceptively simple central idea of the book is that it is easier to minimize environmental damage by giving serious forethought to how materials are designed than to try to manage the clean up of poorly ecologically-designed products. Given the proper use of technology, much of which already exists, the problem of how to dispose of waste would be ameliorated to a large degree. Geiser effectively prolepts counterarguments about 'cost effectiveness' by pointing out that in many cases, there is a "win-win" solution that manufacturers could use that would keep production costs down as they employ environmentally friendly practices. This book lays out some important ideas about how societies can move toward sustainability.

### *The Environmental Implications of Population Dynamics*

*By Lori M. Hunter*
*Santa Monica, CA: The Rand Corporation, 2000*
*ISBN: 0-8330-2901-0*

Lori Hunter offers a brief overview of some of the trends associated with population growth, such as climate and land-use changes. She presents figures on populations of the world's largest cities, along with their respective growth rates, pointing out the significantly higher growth in the less-developed countries. She summarizes recent World Resources Institute data on the largest world "megacities" for a number of pollutants, such as sulfur dioxide, nitrous oxide, lead, carbon monoxide, and ozone. She discusses the longer-term implications of differences between the more-developed and less-developed world regions in terms of population pyramids. She briefly looks at energy usage by source, summarizing data from 1850-1990. She concludes with some specific policy implications, including a call for more international cooperation, and a greater mindfulness of the "reciprocal nature of the relationship between population and environment."

### *In the Absence of Predators: Conservation and Controversy on the Kaibab Plateau*

*By Christian C. Young*
*Lincoln, NE: University of Nebraska Press, 2002*
*ISBN: 0-8032-4916-0*

Focusing on the case of the Kaibab Plateau north of the Grand Canyon, Christian Young points out some of the difficulties inherent in humans attempting to "manage" wildlife in an ecosystem. Young examines how an apparent "population explosion" of deer in the 1920s was at first attributed to a decline of natural predators, and how that view came to be modified over time as various groups became involved in the social construction of the problem. The sorts of groups Young considers include government agencies (themselves differentiated into representing state and federal interests), scientists from an array of disciplines, conservationists, and

hunters. The message is that controlling wild populations is a difficult and complex problem. Adding to the complexity is a multitude of voices, each with its own interests. Young concludes that anyone attempting to "manage" nature should be aware of the tremendous complexities involved, many of which are not controllable, particularly without disturbing some other aspect of the natural ecology. Thus, anyone attempting such a task should approach it with "flexible and interactive management plans."

### *Inventing Medieval Landscapes: Senses of Place in Western Europe*

*Edited by John Howe and Michael Wolfe*
*Gainesville, FL: University Press of Florida, 2002*
*ISBN: 0-8130-2479-X*

In this collection of essays edited by John Howe and Michael Wolfe, historians engage how the concept of "landscape" has itself evolved. The included essays examine questions such as how landscapes have been created symbolically in the human imagination and how they have been managed in various historical contexts including, for example, Islamic Spain, Anglo-Saxon England, and Late Medieval Venice. An important set of questions revolves around how public and private space are conceptualized, and how those conceptions are negotiated in different times and places. Another common theme is that as far back as medieval times (and no doubt farther back than that), forests already figured prominently in the human imagination, with commonly held ideas about nature (such as the "forest primeval") being deeply embedded in the human psyche. Neither are contestations about how those ideas are best constructed socially anything new. This collection of historical essays lends a perspective on how themes about nature and landscape played themselves out in medieval times.