Critical Environmental Hermeneutics

John van Buren*

Local, national, and international conflicts over the use of forests between logging companies, governments, environmentalists, native peoples, local residents, recreationalists, and others—e.g., the controversy over the spotted owl in the old-growth forests of the Northwestern United States and over the rain forests in South America—have shown the need for philosophical reflection to help clarify the basic issues involved. Joining other philosophers who are addressing this problem, my own response takes the form of a sketch of the rough outlines of a *critical environmental hermeneutics*. I apply hermeneutics, narrative theory, and critical theory to environmental ethics, and use this hermeneutical theory as a method to illuminate the "deep" underlying issues relating to the perception and use of forests. In applying this method, I first take up the analytical problem of identifying, clarifying, and ordering the different interpretive narratives about forests in terms of the underlying epistemological, ethical, and political issues involved. I then address the critical problem of deciding conflicts between these different interpretations of forests by working out a set of legitimation criteria to which all parties concerned would ideally be able to subscribe.

ENVIRONMENTAL INTERPRETATIONS AND NARRATIVES

Philosophical hermeneutics was developed in the twentieth century by Martin Heidegger, Hans-Georg Gadamer, and Paul Ricoeur and was carried forward in different directions within the critical theory of Jürgen Habermas and the contemporary American pragmatism of Richard Rorty.[1] Generally, hermeneutics can be defined as the philosophical study of the most common aspects of interpretation—of what people do when they interpret something. These aspects include such things as intentionality, being-in-the-world, language, sociality, time, and narrative. The more practical task that hermeneutics

* Philosophy Department, Fordham University, Bronx, NY 10458–5165. Van Buren's philosophical interests include twentieth-century continental thought and environmental ethics. He is the author of *The Young Heidegger: Rumor of the Hidden King* (Bloomington: Indiana University Press, 1994) and coeditor with Theodore Kisiel of *Reading Heidegger From the Start: Essays in His Earliest Thought* (Albany: State University of New York Press, 1994). An earlier version of this paper was presented at an international and interdisciplinary conference on woodlands, "Land Life Lumber Leisure," which was organized by the geographer Anne Buttimer at the University of Ottawa, Canada, in 1991. For critical comments, the author wishes to thank the two reviewers, Jim Cheney and Max Oelschlaeger, the editor, Eugene Hargrove, as well as the forester and naturalist, John Foster, who is working to preserve the forests in the author's home province of British Columbia, Canada.

[1] Martin Heidegger, *Being and Time,* trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962); Hans-Georg Gadamer, *Truth and Method* (New York: Continuum, 1975); Paul Ricoeur, *Hermeneutics and the Human Sciences,* trans. John B. Thompson (Cambridge University Press, 1987); Jürgen Habermas, *Knowledge and Human Interests,* trans. Jeremy J. Shapiro (Boston: Beacon Press, 1971); Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979).

addresses can be summed up as that of finding ways to deal with "the conflict of interpretations" in the world.[2] Philosophical hermeneutics has already been applied to such special philosophical disciplines as ethical theory, aesthetics, and political philosophy, as well as to various social sciences and humanities,[3] including those that study the environment, e.g., geography. I argue here that hermeneutics can be applied just as fruitfully to environmental ethics. The results of this application, which can be called *critical environmental hermeneutics* or *hermeneutical environmental ethics*, addresses the general features of interpretation, specifically of the environment, and attempts to clarify and help us cope with the epistemological, ethical, and political conflicts that arise.[4]

Let me describe very quickly the most general features of this environmental hermeneutics. It studies primarily the *sense* or *meaning* of the environment for perceivers and is thus unlike the natural sciences, which are focused primarily on the biophysical aspects of the environment. This sense of the environment is both interpretive and narrative. There are many different interpretations of the meaning of, for example, a forest. I may see a forest *as* a religious "sanctuary," i.e., interpret it in terms of the presuppositions of my religious tradition. Someone else might see it *as* "timber" or "wood fiber." Moreover, this interpretive sense of environment usually also has the form of a *narrative* or story, since it usually entails views of the past, present, and future, and these function like the beginning, middle, and end in the unified plot of a narrative, as defined classically by Aristotle.[5] For example, consider Amerindian experiences of forest as "land" or "dwelling place." Here forest might be the setting for a narrative with its beginning (the creation of Earth as home and sanctuary, the role of people as stewards), its middle (what people are now doing with forests), and its end (future salvation or catastrophe). Likewise, the lumber company's view of woodland as "lumber" and "resource" might be bound up with a frontier narrative of conquering an unruly wilderness and using it for the benefit of human "progress." The perspective on woodland as leisure or recreation (e.g., as a site for one's summer cottage) can take place within a narrative of original innocence (original unity with nature), fall (artificiality of

---

[2] Paul Ricoeur, *The Conflict of Interpretations*, trans. Willis Domingo et al. (Evanston: Northwestern University Press, 1974).

[3] See Paul Rabinow and William M. Sullivan, eds., *Interpretive Social Science: A Reader* (London: University of California Press, 1979).

[4] Regarding the term *environmental hermeneutics*, cf. Robert Mugerauer, "Language and the Emergence of Environment," in David Seamon and Robert Mugerauer, eds., *Dwelling, Place & Environment: Towards a Phenomenology of Person and World* (New York: Columbia University Press, 1985), pp. 51–70.

[5] Aristotle, *Poetics* 1450b. Cf. Jim Cheney, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," *Environmental Ethics* 11 (1989): 117–34. For the role of narrative in hermeneutical theory in general, see Paul Ricoeur, *Time and Narrative*, 3 vols., trans. Katherine McLaughlin and David Pellauer (Chicago: University of Chicago Press, 1984).

modern technological society), and periodic releasement from big city life (weekends at the cottage). A biologist or an environmentalist might see woodland within a narrative about a biotic community and its physical basis: for example, the story of a valley or other bioregion told from the standpoint of the evolution of landscape, climatic changes, and species populations, including the human species (cf. James Lovelock's "Gaia hypothesis," which presents the entire global ecosystem within the plot of an original generation of life forms [beginning], present global change and crisis [middle], and future homeostasis in which the human species may or may not disappear [end]). It is these environmental narratives that provide human actors with a great deal of their self-understanding, identity, and roles. For example, in the interpretation of the forest as "lumber," I might understand myself *as* "logger," "forester," or "lumberjack." In other interpretations, I might take up the role of "resident," "conqueror of the wilderness," "hunter," "hiker," "advocate" of nonhuman life, and so on. As Holmes Rolston puts this point, the human self is a "storied-residence" on Earth.[6]

How exactly does environmental hermeneutics, as I envision it, study the interpretive and narrative sense of the environment? It has at least three important tasks here: namely, (1) environmental epistemology (describing and critically evaluating the different views of what the environment is), (2) environmental ethics in a narrow sense (describing and evaluating views of the value of environment), and (3) environmental politics (describing and evaluating who has or should have political power in the environment). By outlining how these principles provide a method that can be applied specifically to the concrete issue of the interpretation of forests and the conflicts which arise here, I provide a more detailed understanding of the principles themselves.

It is important to note at the outset that an analogy with the deep ecology/shallow ecology distinction can be drawn by means of the distinction between a deep hermeneutics and a shallow hermeneutics. Deep ecology claims to be concerned primarily with changing our fundamental paradigms for understanding the environment, whereas "shallow" or "reform ecology" is supposedly concerned mainly with changing legislation, practices, and life styles, but without understanding fully that these are the consequence of our underlying traditional paradigms of understanding.[7] Similarly, a distinction can be made between a deep hermeneutics, which analyzes the underlying epistemological, ethical, and political sense of practices and interpretations of the environment,

---

[6] Holmes Rolston, III, "Storied Residence on Earth," in Rolston, *Environmental Ethics: Duties to and Values in Natural World* (Philadelphia: Temple University Press, 1987) pp. 341–54. For the general point that our self-understanding is interpretive and narrative, see Donald E. Polkinghorne, *Narrative Knowing and the Human Sciences* (Albany: State University of New York Press, 1988), pp. 146–55.

[7] See Bill Devall and George Sessions, *Deep Ecology: Living as if Nature Mattered* (Salt Lake City: Gibbs Smith, 1985).

and a surface hermeneutics, which focuses mostly on what really derives from the application of the former, i.e., on specific knowledge, legislation, policy, and practices regarding such things as silviculture, establishing wildlife sanctuaries, hunting regulations, pollution laws, etc. In applying environmental hermeneutics to the problem of forests, my discussion is focused mainly on a deep hermeneutics of the underlying epistemological, ethical, and political issues.

EPISTEMOLOGY, ETHICS, AND POLITICS OF THE FOREST

As it relates to forests, *environmental epistemology* means not only the analysis of how such things as intentionality, being-in-the-world, language, mood, history, etc.[8] function in our interpretation of woodland, but also the descriptive typology of the different interpretive views or knowledges (*episteme*)[9] of woodland. The basic perspectives on forest can be broken down into "land," "life," "lumber," and "leisure."[10] Each of these, of course, contains a plethora of subtypes. Under forest as "land," in the sense of dwelling place or home, are different interpretations by such groups as year-round residents in small communities, Amerindians, settlers, and farmers, and those using the forest as sanctuary, sacred land, burial ground, sacred grove, hermitage (for example, the monastery, the back-to-nature movement begun in the 1960s, the solitary trapper).[11] The view of forest as "life" encompasses different interpretations by biophysical scientists and biocentric ecologists, for example, the environment as a biotic community or as a single organism. Interpretations of forest as "lumber" include those of local logging and sawmill operators, national and multinational lumber companies, daily loggers and lumber workers, alternative or holistic foresters, government forestry departments, and

---

[8] These and other features, as they relate to the interpretation of diverse environments, have been explored in, for example, Seamon and Mugerauer, *Dwelling, Place and Environment* and Don Ihde, *Technology and the Lifeworld* (Bloomington: Indiana University Press, 1990).

[9] *Knowledge* or *episteme* is to be taken here in Michel Foucault's sense of an underlying interpretive "world view," where knowledge can therefore be used in the plural—"knowledges." See Michel Foucault, *The Archaeology of Knowledge,* trans. A.M. Sheridan Smith (New York: Pantheon Books, 1972), p. 191.

[10] For this classificatory scheme and that of "people," "officials," and "academics," see Anne Buttimer, John van Buren, and Nancy Hudson-Rodd, eds., *Land Life Lumber Leisure: Local and Global Concern in the Human Use of Woodland, An Interim Report,* printed by and available from the Department of Geography, University of Ottawa, 1991. For complementary classifications, see Ray Raphael, *Tree Talk: The People and Politics of Lumber* (Washington, D.C.: Island Press, 1981) as well as the special issues on forests in *The Trumpeter* 6, no. 2–3 (1989) and 7, no. 2 (1990).

[11] Cf. Linda H. Graber, *Wilderness as Sacred Space* (Washington, D.C.: Association of American Geographers, 1976); Jay H. C. Vest, "Will-of-the-Land: Wilderness Among Indo-Europeans," *The Trumpeter* 3 (1986): 4–7; John C. Miles, "Wilderness as Healing Place," *The Trumpeter* 3 (1986): 11–18.

Amerindian small-scale harvesters. The view of forest as "leisure" encompasses such different perspectives on forest as the recreational hunting and fishing area, the park and game reserve, the hiking and skiing area, the forest of the Boy and Girl Scout movements, and the forest of the summer cottage.

When interpreting any of these specific types of forest, one can investigate such characteristics as the historical aspect (the constellations of cultural presuppositions at play in it), the narrative aspect (the narratives about woodland which it expresses), and the existential aspect (the types of narrative "roles" for human and nonhuman actors, i.e., the *genres de vie*, which it provides). In addition to these rather broad analytic categories, we also need, of course, concepts which are more specific and conducive to empirical research, and thus more in touch with the environmental disciplines that have been underway for years in branches of geography, biology, psychology, political science, law, sociology, anthropology, economics, history, literary criticism, and theology.

Interpretations and narratives express not only different and conflicting knowledges of what forest is, but also, of course, conflicting values or moralities. The beginning-middle-end structure in the plot of narratives usually involves an "end" in the sense of a value, a future goal, which tells us where the story is going or should be going, if it is to have a "happy ending."[12] As it applies to the study specifically of forests, one of the tasks of *environmental ethics* is thus the analysis of forest narratives for the different values they express.

An initial classification of such values can be found by seeing how each of the four basic perspectives on woodland analyzed above—land, life, lumber, leisure—expresses a cluster of basic values or goods in forests, which can in turn be broken down into subtypes.[13] The land perspective includes the values of home or dwelling, including all associated social, community, and religious values. The integrity ("intrinsic value") of biotic forest life, biotic home and community, and general life-support are expressed in the ecological life perspective. The biological life perspective includes natural historic values (forests as natural museum providing a sense of antiquity, duration, and continuity), scientific values (discovery of new knowledge about animal and plant species, climate, waters, whole ecosystems, etc.), and medical values (indigenous folk medicine, the discovery of new species with medical benefits). The lumber perspective expresses mainly the economic value of forests as resource. Finally, the leisure perspective encompasses the values of recre-

---

[12] Alasdair MacIntyre makes this point throughout his *After Virtue: A Study in Moral Theory* (Notre Dame: University of Notre Dame Press, 1984).

[13] Cf. the classifications of forest-related values given in Holmes Rolston, III, "Values Deep in the Woods," *The Trumpeter* 6 (1989): 39–41; Donald VanDeVeer and Christine Pierce, eds., *People, Penguins, and Plastic Trees: Basic Issues in Environmental Ethics* (California: Wadsworth, 1986), pp. 67–105.

ation and outdoor life, including aesthetic values and character-building values.

One can see these values at work even in the recent concern with sustainable development and, as it relates specifically to forests, with sustainable forest management. The Bruntland Commission defined *sustainable development* as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[14] The words *development* and *needs* in this definition are, of course, not purely descriptive terms. Rather, they are also value terms. *Needs* refer to things needed and valued, and *development* refers to cultivation of the means to realize these needs, values, or goals. In accordance with sustainable development, present realization of needs or values ought not to threaten future realization. As many people have pointed out, there is a real problem in determining exactly what *needs* and *development* mean in the Bruntland Commission's definition.[15] One cannot simply assume, as many do, that these controversial terms primarily have an economic meaning, for they have more than one meaning and involve evaluative decisions. In the specific case of sustainable forest development, it is easy to see that each of the above four clusters of values corresponding to the four land, life, lumber, and leisure narratives about woodland expresses a different and potentially conflicting concept of sustainable development. The latter can, therefore, mean the development or realization of human dwelling (the land perspective); biotic integrity, community, and life-support (the ecological life perspective); natural history, scientific study, and medical values (the biological life perspective); economic resources (the lumber perspective); or, finally, recreation and outdoor life (the leisure perspective). As a result, value conflicts regarding forests cash out as conflicts about the definition and practice of sustainable development.

Particular values are always affirmed within a general moral orientation, paradigm, or framework of justifying principles—i.e., a morality that tells us why a particular value is important. The standard primary division in environmental ethics these days is between anthropocentric moralities that affirm the hierarchical centrality of human species and nonanthropocentric egalitarian moralities that affirm the whole biological community on the planet, of which the human species is only one member. In most Greek ethical theories, nonhuman nature and thus forests are valuable only as a means to realizing the excellence (*arete*) of human life, which is the highest purpose in the hierarchical-teleological order of nature. Likewise, most traditional forms of Christian ethics take nature and forests in particular—"Creation"—to be valuable only

---

[14] World Commission on Environment and Development, *Our Common Future* (New York: Oxford University Press, 1987), p. 43.

[15] Cf. J. Ronald Engel and Joan Gibb Engel, eds., *Ethics of Environment and Development* (University of Arizona Press, 1990) and the special issue on sustainable development in *The Trumpeter* 5 (1988).

as a means for the soul's journey to God. Modern utilitarianism portrays forest as valuable in relation to its utility as dwelling place, life-support, resource, and recreation for realizing the greatest good of the greatest number of human beings. Modern rights theories present forest as valuable insofar as it provides the means of realizing the inalienable rights of humans. For example, forest as life-support and resource guarantees the right to life and to a decent standard of living; forest as home is the exercise of the right to property; and forest as recreation is the exercise of liberty.

One group of nonanthropocentric egalitarian moralities includes varieties of ecological utilitarianism, biocentricism, holism, the land ethic, and ecofeminism, most of which share the view that individual biota in forests (including human beings) are valuable in relation to the promotion of the health, well-being, and community of the whole forest ecosystem. In turn, entire forest ecosystems are valuable in relation to their promotion of the health and community of the entire planetary ecosystem. According to ecological rights theories, on the other hand, individual forest biota have basic inalienable rights, the primary one of which is the right to life, and these rights cannot be overridden except in special circumstances. Another group includes postmodern anarchism, decentralism, and bioregionalism, according to which all individual life forms or individual communities should be autonomous or self-governing and should not be oppressed and marginalized by external authorities.

Interpretations of forests express not only different basic knowledges and values, but also political narratives about which of these knowledges and values are or should be represented, valorized, and empowered in the public sphere and allowed to determine public discourse, policy, and management concerning the environment. A first task of environmental politics is therefore to analyze interpretations regarding which social groups are being politically represented and empowered in them. Each interpretation of forests involves an answer to the question: whose interests does it represent? What social group does it empower? One needs to map out a typology not only of forest knowledges and forest moralities, but also of forest politics—that is, of the different and conflicting interest groups involved.

We can divide human actors related to forests into at least three social categories, namely, people, officials, and academics. By *people* I mean not only "the common people," but that whole diverse mass of those who do not fit into the categories of officials and academics: for example, residents, loggers, native peoples, alternative forestry groups, grass-roots environmental groups, artists, recreational users, the women's movement, etc. *Officials* include those involved in all levels of policy making and management in government and in business, in forest and forest-related companies. Under *academics* one finds, of course, radically different groups: natural scientists, social scientists, and those in the humanities. Obviously, there cannot be an exact mapping of the land-life-lumber-leisure perspectives and their corre-

sponding home-integrity-resource-recreation values onto the academics-officials-people groups. Members of each of the three social groups could be found to fit into any of the different perspective and value categories. Defining these categories stipulatively does not have much value for the study of the real workings of human society. A better approach is to focus on the perspective and value orientations held by the majority in each of the social groups.

In the world of academics, natural scientists tend to represent the biological life and lumber perspectives, as well as the corresponding natural historic, scientific, medical, and life-support values. Social scientists tend toward the land, leisure, and lumber perspectives and the dwelling, recreation, and resource values. Academics in the humanities tend to be attracted to the land, leisure, and ecological life perspectives, as well as the dwelling and recreation values. An important issue for consideration is which academic group has traditionally been given the greater power both within the political structure of the university community itself and within the university-government-business triangle (with respect to, for example, funding for facilities, research, hiring, interdisciplinary programs, and international network links). Experience shows that it has usually been the life-lumber-resource narrative of natural scientists and a sector of social scientists that has functioned as the official and favored voice for the university in the public realm. In the sphere of officials, one finds that the majority in business represent the lumber perspective and the resource value of forests. In government, it is again primarily the lumber perspective and resource value that are affirmed, with some attempt to accommodate the other land, life, and leisure perspectives and their corresponding values.

The social category of people contains a wide diversity of perspectives and values. Residents tend, of course, to represent the land perspective and the dwelling value. Among native peoples, one finds predominantly the land and ecological life perspectives and the dwelling, biotic community, integrity, and life-support values. The majority of forest industry workers, along with all those who depend indirectly on the forest industry for their livelihood, tend to affirm the lumber perspective and resource value. Alternative forestry groups tend toward both the lumber and ecological life perspectives, as well as a mix of the resource, biotic community, integrity, and life-support values. Members of environmental movements advocate the ecological life perspective and the biotic community, integrity, and life-support values. Recreational users naturally express the leisure perspective and recreation values. If we ask which group or groups in the people category have traditionally had their forest narratives represented and politically empowered in the public realm, it is easy to see that first comes forest industry workers and those who depend economically on this industry, then residents, and finally recreational users. Native peoples, environmental movements, alternative forestry groups, the women's movement, and other groups are still struggling to have their stories heard in

the so-called "green decade" of the nineties. Regarding the relations of the three main groups to each other, it seems that traditionally officials have taken priority over both academics and people.

Another important issue here is whether a fourth domain of perceivers and users of woodland should not be the other forms of life on the planet, i.e., the nonhumans. As Aristotle noted in *De Anima* II–III long before the advent of modern mechanistic biology, animals do possess awareness (*aisthesis*, sensibility) and therefore must have some sort of perspective on the world. Aristotle also maintained that they possess expressible desire (*orexis*), needs, the capacity for pleasure and pain, and therefore presumably some sort of "interests." Although plant life does not possess sensible awareness, it is still likewise a teleological or goal-oriented form of life, i.e., a self-initiating movement toward maturity and reproduction of the species. While many argue that nonhuman life forms do not have the power of expression, there are nonetheless ample "advocates" in the human world to represent their perspectives, interests, and use of the environment. Even though nonhumans may need to be represented in the political arena by sectors of academics and people (those with the ecological-life perspective), they still seem to be a separate group (something like "the unborn") and worthy of being treated as such in environmental epistemology, ethics, and politics.[16]

DIALOGUE AND LEGITIMATION

Such identification, clarification, and ordering of the conflicting knowledges, values, and politics regarding forests serve to illuminate just *what* the underlying problems are and just *which* of the various approaches have been and can be taken. This kind of descriptive analysis has the merit of helping to ensure that the problems and conflicts are addressed in a clear and intelligent manner without the parties involved talking, as they often do, at cross-purposes. Ultimately, however, it only highlights and makes more urgent the *critical* task that environmental epistemology, ethics, and politics have to address—namely, judging the "truth-value" of different environmental knowledges, values, and politics about forests and so somehow arbitrating conflicts between them. How can a *critical* environmental hermeneutics provide a method for fulfilling this task as it relates specifically to forests? It is this question to which I now turn.

A problem often pointed out in controversies over the use of forests is the lack of willingness of the parties involved to "talk to each other" and "listen to each other," as well as the lack of institutional arrangements for such dialogue. A first step in dealing with the critical problem of arbitrating between conflicting perspectives is thus the cultivation of communicative openness in institu-

[16] Cf. John S. Dryzek, "Green Reason: Communicative Ethics for the Biosphere," *Environmental Ethics* 12 (1990): 205–07.

tional forums for dialogue in which all knowledges, values, and social groups can participate. Strategies for dialogue need to be explored in and between the institutional sectors of academics, officials, and people. The university functions as a setting for seminars and conferences in which there can be wide involvement. In government and business, forums for dialogue can be cultivated through cooperation between business, labor, and community; environmental hearings and conferences; constitutional reform conferences, including questions of an "environmental bill of rights"; native land claims negotiations; referendums on environmental issues; and international exchange—e.g., in the United Nations. Among people, community groups and popular movements can play a large role in promoting dialogue and exchange. The growth of such forums can provide more opportunities for epistemological, ethical, and political conflicts to be fought out and worked out at the table in rational debate—and not with guns on logging roads and on proposed development sites.

But such calls for more dialogue, consultation, and participation only go halfway. What is also needed is the willingness of the parties concerned to become conscious of and to argue for their underlying assumptions (e.g., the strictly economic definition of sustainable development that is usually bandied about). One cannot simply take these assumptions for granted as self-evident and use them to draw inferences or explore points within the parameters opened up by the assumptions (e.g., arguing for a particular method of realizing economic sustainable development or merely supplementing this economic definition with other apparently less important definitions such as the sustainability of *genres de vie*). There is a fundamental social demand in our "rational" civilization going back to Socrates and the rhetorical tradition that opinions be backed up and legitimated with rational argumentation, as opposed to basing them merely on the status quo language of the public realm, on the authority of senior academics, or on folk tradition, allegiances, habit, feeling, and intuition. Although human understanding would never get off the ground without them, these things only provide us with starting points that can and should be raised to the level of reflection, analyzed, and critically defended.

This demand for rationality or, better said, reasonableness in our communicative dealings with others is, of course, empty without acknowledged norms or criteria for legitimating our viewpoints. We need to be able to appeal communally to criteria that enable us to decide about the truth of interpretations and to settle disputes between conflicting interpretations. What prevents environmental interpretations from becoming arbitrary? Are we thrown into relativism and anti-science here? There are in fact a number of criteria available for assessing interpretations of the environment and of forests in particular. In the following, I sketch out biophysical, historical, technical, and ethical-political criteria. The biophysical criterion (does the interpretation fit the biophysical reality of the bioregion in question?) and the historical

criterion (does it fit in and cohere with individual and shared traditions?) relate to environmental epistemology. The technical or pragmatic criterion (does it work, is it efficient, does it produce the desired end?) and the ethical-political criterion (does it satisfy fundamental ethical-political norms?) relate to environmental ethics and politics.

The Biophysical Criterion

To begin with, it is important to acknowledge that, in spite of the anxieties of positivistic science and philosophy, for which the world consists of naked facts determined by the natural sciences and all other views are to be dismissed as merely "subjective," it is simply a *fact* of life that the biophysical world lends itself to a number of interpretations as to its *sense for* human beings, and that these interpretations, to one degree or another, all "correspond" to "reality" and reveal some aspect of it. One and the same forest can, obviously, lend itself to and support all four types of interpretation: namely, land, life, lumber, leisure. Unlike the positivist, a tree has no qualms about being interpretively related to as "shade" for picnickers, as "log" for the logger, as "ladder" for a would-be Romeo, as "home" for the squirrel, or as "matter" for the physicist.

The biophysical criterion stipulates only that interpretations must be "fitting" to the bioregion, that they must fit the biophysical world to which they refer. Truth here means interpretive fittingness and adequacy.[17] Even though a particular perspective on the environment is creatively interpretive and obviously goes beyond what is there from a purely biophysical standpoint, it must nonetheless be adequate to the biophysical reality. This definition of interpretive truth both harkens back to and makes an advance on the classical definition of truth as *adequatio intellectus et res*, the "adequation" (correspondence) of intellect and thing. It is neither the realist definition of truth (simple correspondence of mind to the biophysical) nor the idealist definition (correspondence of the biophysical to the mind), but rather a third middle way for the definition of truth as the interpretive fittingness or adequacy of mind to the biophysical. Truth means *creative* correspondence, *interpretive* adequacy, because, even though a viewpoint has to fit the biophysical world, it still mediates and interprets this physical world in terms of the realm of cultural sense or meaning.

---

[17] For the general notion of truth as interpretive fittingness, see Paul Ricoeur, "On Interpretation," in Alan Montefiore, ed., *Philosophy in France Today* (Cambridge: Cambridge University Press, 1983), pp. 175–89. Robert Mugerauer gives, in effect, the example of applying the biophysical criterion of fittingness to conflicting views of the Grand Canyon by explorers, tourists, native peoples, and government officials ("Language and the Emergence of Environment," p. 57).

Let me stress that truth as interpretive adequacy does *not* mean that "anything goes," that all interpretations are right. In the first place, even though there may be many right interpretations, there are some interpretations that are obviously wrong—they just don't fit. To take a silly example, the paranoid's interpretation of the forest as a hostile spirit disguised in the form of trees and plotting against the human race is obviously wrong from the standpoint of the biophysical criterion (though it may be right from the standpoint of other criteria, e.g., artistic ones in a poem or surrealist painting). Second, regarding settling disputes between conflicting interpretations, some are more right (fitting) than others. For example, in a forest bioregion with healthy harvestable trees, where the number of animal species and individual species populations are very low, the planner's view of the forest as potential game reserve might be less right/fitting than the forest industry's view of it as lumber. In another kind of bioregion, where trees are few in number or the majority are of a noncommercial species, the resident's view of it as home may be more right/fitting than the forest company's view. In another forest bioregion, a multiple-perspective approach involving multiple-use of the forest might be the most fitting interpretation. Conflicting interpretations all reveal some aspect of the forest and are therefore true to some degree—i.e., fit to one degree or another—but some reveal more than others about the biophysical forest—i.e., fit better.

The biophysical truth of interpretations of forest and of other environments can be determined through dialogue based on the experience, research, and expertise of people in the environmental sciences and in nonacademic sectors (e.g., experienced foresters, native peoples, local residents). People in academic disciplines can contribute to this dialogue through studies of the biosphere (human and nonhuman life), the atmosphere (air, climate in its local, regional, and global aspects), lithosphere (soils, minerals), and the hydrosphere (waters). Such studies take the more specific form of environmental assessment and impact studies that research the effects on ecosystems from acting out different views of forest, and thus help determine whether the views in question are fitting or unfitting to the biophysical world.

The Historical Criterion

As explained above, the reality of the forest is not only its biophysical aspects, but also its historical traditions. The reality of the forest in relation to which interpretations are fitting is, therefore, also this body of social (economic, moral, religious, aesthetic, etc.) traditions regarding forest, including the local *genres de vie* of forest bioregions. The historical criterion for deciding the fittingness of interpretations is a version of the coherence theory of truth because it calls for examinations of how an interpretation coheres or fits in with historical traditions, and to what extent it involves either creative growth or alienating disruption (culture shock). A real danger is that new and different

views of the forest may lead to cultural displacement, alienation, and homelessness for traditional users. Here again truth means creative adequacy in the sense of an interpretation that, while perhaps creatively modifying traditions, nonetheless is fitting to these traditions.[18] Environmental assessment and impact studies using this historical criterion are obviously the domain not of biophysical disciplines, but of environmental disciplines in the social sciences and humanities, which can research the effects on social traditions from acting out different views of forest and thus determine which of the views in question are fitting or unfitting. By itself, the historical criterion does not get us that far, and needs to be guided by other ethical and political criteria. What if the tradition with which an interpretation fits is morally questionable?

The Technical Criterion

Another criterion for deciding the truth of interpretations is the technical or pragmatic criterion. Here one asks: does the interpretation work? Is it (e.g., the lumber perspective) efficient in relation to the end in view that is to be produced or realized (material well-being)? Does it provide the right means (say, a program of tax incentives and penalties) for realizing the desired end (sustainable economic development of forests)? As William James put it, here truth means what works, what is pragmatic, what is fitting and adequate to pre-given ends. This technical criterion is the domain of instrumental reason, or what the Greeks called *technē,* technique, technical knowledge.[19] There are two basic characteristics of this type of instrumental rationality that point to its shortcomings. First, the ends to be realized, which are usually economic or organizational in nature, are simply assumed as pre-given, and the real concern is simply with finding efficient means for producing these ends. Instrumental rationality is concerned solely with efficiency of use and manipulation of the world to produce desired ends. In other words, it cannot itself supply us with the ends or goals of human life, but rather simply takes these from the status quo and serves them. The technical criterion can certainly help us decide which are the better means for a given end, but it cannot choose between alternative ends themselves and rationally legitimate this choice. Just because we have the technical ability to do something (e.g., in genetic biotechnology) does not mean *ipso facto* that we *should* do it. Second, this technical knowledge may become concentrated in an elite of experts or technicians so that the sphere of activity in question comes under the sway of "technocracy" or "expertocracy," that is, authoritarian rule. When the sphere of activity in question concerns

---

[18] For this historical criterion in hermeneutical theory, see Gadamer, *Truth and Method,* p. 274, and G. B. Madison, "Method in Interpretation," in his *The Hermeneutics of Postmodernity: Figures and Themes* (Bloomington: Indiana University Press, 1988), pp. 25–39.

[19] See Habermas, *Knowledge and Human Interests,* pp. 301–17.

people directly, as in a technical approach to social activity and organization, then the human sphere can become the object of manipulation and production in political technocracy. Persons are here treated merely as means and not as "ends in themselves" (Kant)—i.e., they are depersonalized, dehumanized. Like the historical criterion, the technical criterion needs to be guided by ethical criteria.

The Communicative Ethical-Political Criterion

Because instrumental reason is concerned solely with means and not ends, and by itself tends to reduce persons to the realm of manipulable things, it has to be, as Aristotle put it, "ruled" by practical or ethical reason (*phronesis*) (*Nicomachean Ethics* VI). Practical reason is concerned with the ends of human action that are worked out in rational discourse (*logos*) between free citizens in the public or political sphere. Aristotle's practical reason has therefore come to be called communicative reason in contemporary thought.[20] Instrumental reason, on the other hand, does not communicate with others through dialogue and debate about the ends of life—it simply tells you what to do, or else uses manipulation and direct force "without wasting words."

Communicative rationality supplies us with a communicative ethical-political criterion to legitimate environmental narratives and arbitrate between them when they conflict. Here one asks if the adoption in the public sphere of the views, values, and politics of an interpretation (e.g., forests as lumber) or a particular combination of interpretations (e.g., hierarchical multiple use of forests with lumber leading the way) has been or can be arrived at in conformity with the fundamental procedural norms or ideals for making decisions democratically in society. Jürgen Habermas and others have argued that these norms are built right into the very nature of the human being as *zoon logon echon* (animal rationale), a living being capable of (social) discourse. As procedural democratic norms, they concern not so much *what* is being talked about and decided in our communicative praxis with one another as rather *how* it is being talked about and decided. These norms include universal participation in decision making versus monopoly by particular interest groups; free versus coerced discussion; equality of opportunity versus a priori privileges; respect for others; tolerance; and consensus which ideally should be universal, but realistically has to be in the form of a majority. In applying these communicative ethical-political norms, one asks: to what extent was or can the adoption and empowerment of a particular view or hierarchical combination of views of forests be arrived at through free and universal discussion involving equality,

[20] See Jürgen Habermas, *The Theory of Communicative Action,* vol. 1, *Reason and the Rationalization of Society* (Boston: Beacon Press, 1984).

respect, and tolerance, and universal consensus?[21] Or, conversely, one can ask: to what extent does a view of forests—let us say the European-colonialist grand narrative of North American forests as untamed wilderness to be conquered for human progress—falsely universalize itself by claiming to be the whole truth, misrepresent its interests as the interests of all (ideology), and thus *ipso facto* marginalize and exclude other views—for example, those of native peoples?[22] Ethical-political truth means here fittingness or adequacy to communicative ethical-political norms that are meant to insure the "common good."

The application of these norms means the democratization of the forests and the environment in general. They allow for the participation in decision making of all sectors of human society: people, officials, academics. They should include groups that traditionally have been marginalized and politically silenced: women, minorities, indigenous peoples, children, the unborn, the poor, the Third World, etc. Participation becomes cross-cultural when these norms are applied in international political institutions (e.g., the United Nations). Participation becomes still wider and even planetary if nonhuman forms of life are seen as a legitimate group of perceivers and users of the environment, and are no longer related to merely on the level of instrumental reason as "resource," but rather welcomed into the dialogue community of all living things on the planet, even though the practical reality of "communication" remains problematic here (as it is in the case of, say, "the unborn").[23]

Critical environmental hermeneutics stands "beyond objectivism and relativism"[24] in its treatment of environmental issues, insofar as it involves a search for a balance between the objective and the relative. Relative elements are acknowledged in the creative role of historical and cultural interpretation in the perception and use of forests. Objective elements are affirmed in the application of the four criteria outlined above for judging the "truth-value" of interpretations of the environment. They were also affirmed earlier in my analysis of the general aspects of environmental interpretation and in my typologies of forest knowledges, values, and politics. Other approaches to environmental issues often suffer from being either one-sidedly objectivistic or one-sidedly relativistic. Environmental positivism, which reduces sense to physical facts, and early environmental phenomenology,[25] which reduces

---

[21] Cf. John S. Dryzek, *Rational Ecology: Environment and Political Economy* (New York: Basil Blackwell, 1987) and his "Green Reason: Communicative Ethics for the Biosphere," pp. 195–210.

[22] Cf. Cheney, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," pp. 117–34.

[23] Cf. Dryzek, "Green Reason: Communicative Ethics for the Biosphere," pp. 205–07.

[24] For this notion, cf. Richard J. Bernstein, *Beyond Objectivism and Relativism* (Philadelphia: University of Pennsylvania Press, 1983).

[25] See the essays in Seamon and Mugerauer, *Dwelling, Place and Environment.*

sense to intentional essences, fit the former category. Environmental postmodernism,[26] which affirms radical "difference" and relativity in the environment, seems sometimes to fit the latter category by obscuring the possibility of appeal to such shared criteria as I have outlined here. Critical environmental hermeneutics, on the other hand, travels the middle way between identity and difference, objectivism and relativism.

CONCLUSION: TOWARD COMMUNICATIVE ENVIRONMENTAL REASON

In looking at controversies over the perception and use of forests, I have tried to pinpoint the important issues of contention (epistemology, ethics, politics); the conflicting knowledges (land-life-lumber-leisure), values (home-integrity-resource-recreation), and interest groups (people-officials-academics-nonhumans); and finally, the legitimation criteria for resolving such conflicts within dialogue. In exploring these criteria, my aim is not, to begin with at least, to become another party to the epistemological, ethical, and political conflicts between the different views. Rather, it is primarily descriptive and not prescriptive. The role I am pursuing here is more like that of an observing referee who advocates fair play in the "conversation of humankind," who tries to keep the conversation going by suggesting avenues of dialogue, and who urges the participants to strive for consensus that is arrived at on the basis of criteria acknowledged by all parties concerned.

Another point to consider is that all four criteria should be applied in concert with one another, since they need to act as correctives to one another. A view (e.g., forest as lumber) may be biophysically true in the scientific realm (i.e., fitting to the biophysical realities), but communicatively invalid in the political realm, since it has not been adequately worked out in conformity with ethical-political norms and is in fact based on relations of manipulation, distortion, and oppression (e.g., in colonialism and cultural imperialism). Similarly, a view (e.g., forest as leisure organized by big business) may be technically true in the sense that it is efficient for the pre-given end of creating jobs in the economic technosphere, but at the same time it can be historically-culturally invalid insofar as it threatens to destroy traditional *genres de vie* in small communities. Likewise, a democratically chosen approach in forest management might be based on a gross misunderstanding of the biophysical world. None of the criteria on its own gives us the whole truth. The ideal here is to satisfy all four criteria or to find a creative compromise between them (one might also have to consider if some of the criteria are more important than others). Similarly, with regard to the substantive content of the decisions made, the ideal is to realize

[26] Cf. Cheney, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," pp. 117–34; John Llewelyn, *The Middle Voice of Ecological Conscience* (London: Macmillan, 1991).

genuine multiple-use of forests—i.e., a creative compromise between the different views, values, and interest groups.

Communicative ethical-political norms have a special role in this process, since they have a kind of meta-function in relation to the other criteria. They function as a standard not only for political decisions in the public realm, but also for the application of each of the other three criteria. These latter criteria can work only if there is free and open discussion striving for rational agreement among and between academics, people, and officials about which environmental perspectives are most fitting for the bioregion in question (biophysical criterion), for the traditional cultural realities and local *genres de vie* (historical criterion), and for the realization of chosen goals (technical criterion). The ethical-political norms of communicative environmental reason are really the conditions of the possibility of all realms of rational environmental discourse.

The workings of communicative reason in effect provide us with a meta-narrative about particular environmental narratives, i.e., about what we should do in the face of the conflict of narratives about forests and the environment in general. But this story of communicative discourse, of "getting together and talking things out," is a meta-narrative not in the sense of a particular, substantive, and homogeneous perspective that ideologically marginalizes all other perspectives, but rather in the sense of a nonsubstantive, procedural narrative that, without falling into subjectivism, makes room for radical heterogeneity and localism in environmental narratives. It espouses coexistence, communication, compromise, cooperation, and consensus. Heidegger spoke of the historical sense or meaning of the world as "the house of being" in which we "dwell."[27] Thinking, he suggested, is a kind of "original ethics" in the literal sense of "the art of home," or even *ecology* in the literal sense of "discourse concerning the household." In terms of this metaphor, communicative discourse amounts to a meta-narrative of environmental ecumenism and hospitality, of opening the doors to rational debate between different environmental knowledges, values, and interest groups. As an *ideal,* environmental communicative reason is a mansion with many rooms. But how the story turns out in the so-called "green decade" of the nineties, whether we can, *in fact,* dwell together with our differences under the same roof, still remains to be decided.

---

[27] Martin Heidegger, *Martin Heidegger: Basic Writings* (New York: Harper and Row, 1977), p. 193.