Environmental education is drawing increasing attention from ultra reactionary political groups that want classrooms to present the message of how corporations such as Shell Oil, DuPont, and International Paper, are caring for the environment. Groups such as the Center for Environmental Education Research at the Claremont Institute (which is part of the 500 interconnected Wise Use groups spread across the country) and the Alabama Family Alliance (connected with the Focus on the Family network based in Colorado) are not only attempting to reverse public support for the National Environmental Education Act, but are publishing books for parents and teachers on how environmental education should be presented in the classroom. The most noteworthy is Facts Not Fear: A Parent's Guide to Teaching Children About the Environment, with the foreword written by Marilyn Quayle. As critics of environmental education also have the direct and indirect support of the Heritage Foundation, which receives its funding from such corporate giants as Chevron, Dow Chemical, General Motors, and IBM, the future of environmental education is going to become an increasingly contested political battleground.

These efforts to restrict environmental education to the presentation of "factual" information that represents corporations as responsible stewards of the environment, or to eliminate environmental education entirely from the curriculum (which is being attempted in several states), are inevitable outgrowths of the modern tradition of viewing the environment as a resource to be exploited in the name of progress. To such critics, teachers who encourage students to study environmental changes caused by the many forms of technological intervention are bound to be seen as an economic threat, and as betraying a sense of trust owed to the taxpaying public. Environmental educators are, in effect, now being penalized for reversing the long history of environmental miseducation that reinforced the modern assumptions and values underlying the consumer-oriented and technologically dependent culture that these critics now take for granted. The earlier decades of environmental miseducation reflected the dominance of the economic stream of liberal thought that had its origins in the Industrial Revolution. Today's critics of environmental education simply want to continue, without constraint, what is now becoming the digital phase of the Industrial Revolution, but with technologies that contribute to the globalization of the Western consumer lifestyle. This digital phase of the Industrial Revolution, which is mistakenly interpreted as representing the inevitable next stage in the evolution of humankind, is also contributing to the loss of local knowledge of how to live in sustainable relationship with the environment, and the loss of how to
maintain the non-commodified traditions of community life. The reliance of the critics of environmental education upon the liberal assumptions that gave the Industrial Revolution its legitimacy and messianic qualities needs to be taken into account, especially as these critics identify themselves as "conservatives."

The irony of these critics identifying themselves as conservatives when they should be called Classical Liberals is not simply an incidental matter. Nor is the irony of labeling environmental educators as "liberals" insignificant, particularly when their efforts are directed at conserving the viability of human and biotic community relationships. The confusion that characterizes the current discourse among environmental educators, and the increasingly heated rhetoric about the subversive nature of environmental education suggests brings to mind the advice of Confucius, the Chinese sage who suggested that in times of trouble attention should be given to rectifying the use of language. That is, attention should be given to using language in ways that name the basic human relationships, identify the essential attributes, and, in the process, encode the moral norms that are to govern these relationships. Rectifying the political language in a way that highlights the human/nature relationships constituted by the terms "liberalism" and "conservatism" will help clarify the strategy that environmental educators should take in countering the attacks now being directed at them.

The argument of environmental educators that a science based approach to environmental education has no ideological orientation, and that the critics are thus misguided, simply will not be accepted when these critics (many of whom have ties with some form of religious fundamentalism) see science being elaborated into an increasingly powerful and encompassing metanarrative that explains the origins of life and human behavior as genetically determined. While developments in biotechnology currently dominate media attention, it will not be too long before it occurs to the reactionary critics that current scientific metanarratives both secularize and relatives the moral authority derived from their own taken-for granted metanarratives--which is an insight that concerns many other citizens. Nor should environmental educators try to claim that the classroom can be an ideology free zone where just the facts are presented. Aside from the Marxist use of the the word, "ideology" can be partly understood as a shorthand way of referring to the modes of knowing encoded and reproduced in the language of a cultural group. To relate this point more directly to the classroom, the language of the curriculum that names relationships and attributes reproduces the cultural group's patterns of thought and values--which, in turn, serve as the conceptual and moral basis of interpretation. Accordingly, the language of the curriculum reproduces the cultural group's ideological/epistemological taken-for granted conceptual patterns. And what cannot be
interpreted by these conceptual patterns is often ignored or misunderstood. For example, when the language of the curriculum is based on the deep cultural assumption that equates change with progress, the nature of our dependency upon traditions too often is explained in overly simplistic terms or ignored entirely. People who have been educated to think theoretically often combine the lived ideology that is reinforced in the patterns of everyday life with a visionary ideology that represents a more ideal future form of social existence, as well as providing the strategies for attaining it.

While the latter form of ideology is often learned in teacher education courses along with management techniques, and contributes to the current need for the rectification of language, I want to focus more directly on the implications of how the language of the curriculum (regardless of content area) reproduces an ideological orientation. Learning is always mediated by a culturally constructed metaphorical language, with the result that students are learning to think in the categories made available by the root metaphors of the language. When the root metaphors of the culture include patriarchy, human-centeredness, mechanism, and progress, it then becomes normal to think of relationships that give privilege men, the regard the environment as an exploitable resource, that interpret thought as the "firing" of neurons, and assume that all forms of technological change are the expression of progress. The more general point that environmental educators should keep in view is that when a cultural language system is part of the process of learning, a cultural schemata (or ideology) organizes thought into the deep patterns taken for granted by other members of the cultural group--even when there are on the surface, more individually based interpretations. This is one of the givens of the educational process. Explaining this to critics of environmental education is not likely to placate them, given that their real concern with environmental education is that it might lead the public to demand that they cease exploiting the environment in order to enhance profit margins of corporations.

The usefulness of the insight into the language of the curriculum is in the recognition that since there is no ideologically neutral curriculum (because there is no ideologically neutral cultural language) environmental educators cannot be held responsible for meeting the mythical standard of non-neutrality that their critics want. It may also help educators become more sensitive to the ways that culture is reproduced by language in the classroom, thus alerting them to the need to rectify the language of environmental education.

This leads us to the practical question: How will rectifying the political vocabulary of environmental educators, as well as that their critics, help win public support for environmental education? As the general public has over the last few decades become
more comfortable with identifying themselves with so-called "conservatism," we need to ask the question that David Orr raised recently in a British journal (1995): What is it that the conservative critics of environmentalism want to conserve? The answer is indicated by the values and ideas they cite as the reference point for their criticisms of environmental education. This answer clearly establishes that what they want to conserve is the nineteenth century ideology of Classical Liberalism --which is also being revived and given new life by Libertarians and neo-Social Darwinists. They are not interested in conserving the current chemical composition of life systems as we now know them, nor are they concerned about conserving old growth forests, topsoil, aquifers, or plant and animal diversity. Rather, what they want to continue is a way of life where, in a cultural environment of survival of the fittest, individuals can pursue their own economic self-interest. Underlying their assumption about the supposedly natural law of supply and demand is the modern myth that represents technologically based change as the progressive expression of a culture's evolution. They also assume that "truck, barter, and trade" represents the essential core of community life, and that the role of government should be limited to enforcing contracts and protecting private property from those elements of society that lack the competitive qualities necessary for winning their share of the economic pie. This nineteenth century, Industrial Revolution ideology further upholds the individual as the basic social unit, which is represented in viewing intelligence, creativity, and freedom as essential attributes of the individual. It also assumes that human progress can be achieved independently of what is happening to natural systems--which are viewed as natural resources and as private property.

To allow this group's claim to being the true conservatives to go unchallenged is a serious mistake for environmentalists in general, and for environmental educators in particular. Environmental educators who justify their curriculum with the language of liberalism, given its genesis in the transformation of self-reliant communities that was dictated by the economic and moral logic of the Industrial Revolution, further contributes to the problem. In not having learned about the genealogy of Classical Liberalism, and how it spun off a set of beliefs about the competitive market place of ideas, the freedom of the individual to think critically, and the educational need to be emancipated from the constraints of tradition, the critics of environmental education mistakenly see therein a threat rather than the educational extension of their own basic assumptions. Rectifying the political language of both critics and environmental educators would help to quiet the critics, as well as foster support from the more genuinely conservative segments of society.
The rectification of the environmental educators' basic political categories with the overall goals of their curriculum would lead to representing themselves as cultural/bio-conservatives. The central concern of environmentalists, regardless of whether they are ecofeminists, deep ecologists, or social ecologists, is with conserving (and restoring) the viability of natural systems. A careful reading of important environmental writers such as Aldo Leopold, Wendell Berry, Dolores LaChapelle, and Vandana Shiva will put in perspective how conserving traditions of non-commodified community knowledge and relationships are critical to reducing the impact on the environment of technology and anomic, consumer oriented individualism.

The following statements clearly reflect what I call the cultural/bio-conservative orientation of environmental thinkers:

"The basic value of a sustainable society, though, the equivalent of the Golden Rule, is simple: each generation should meet its needs without jeopardizing the prospects of future generations to meet their needs" (Durning, 1991, p. 165); "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold, 1966 edition, p. 262); "Sustainability is embedded in the processes that occur over long periods of time and are not always visually obvious. It follows that ecological design works best with people committed to a particular place and the kinds of local knowledge that grow from that place. This knowledge is slowly accumulated, season by season, through active engagement with the land" (Van Der Ryn and Cowan, 1996, p. 65); "For local indigenous communities, conserving biodiversity means to conserve the integrity of ecosystems and species, the rights to these resources and knowledge, and their production systems based on biodiversity" (Shiva, 1996, p. 1).

These quotations are noteworthy in that they do not assume that change is progressive, that the emancipation of thought and values from tradition is the highest educational goal, and that the primacy of individualism (which is really an extreme form of anthropocentrism) is the basic category for understanding human/nature relationships. The political term that most accurately represents the basic relationships and responsibilities expressed in the above quotations is conservatism. But it is a form of conservatism that recognizes that cultural practices and values must meet the test of ecological accountability.

A more accurate political labeling of environmental education will help broaden the support within the general public, and may also contribute to a much needed discussion within Classical Liberal/Libertarian oriented groups about how to reconcile the deep cultural assumptions that justify the economic part of their political agenda with their less
clearly articulated commitment to localism and the autonomy of the family. As most environmental educators are not accustomed to thinking comparatively about cultural patterns that relate to the ecological crisis, the strategy of rectifying the political discourse that contributes to the double binds within their field will require that they be able to explain how cultural/bio-conservatism would be reflected in the curriculum.

I would like to suggest that the writings of Leopold, Berry, Shiva, among others, as well as what we have learned from ecologically centered cultures, point to the need to introduce into the curriculum what I have described elsewhere as a cultural/bio-conservative view of temporality (that is, how the culture patterns of interacting with the environment take into what has been learned from the past and how they will effect the prospects of future generations). One of the deep cultural myths that has given legitimacy to the Industrial Revolution is that change is linear and progressive in nature, and that rate of progress can be improved as we separate ourselves from the authority of traditions. Today, tradition continues to be represented in the liberal discourse as a constraint on new ideas, values, technologies, and our ability to become completely emancipated individuals. Indeed, this is an example of the power of a visionary ideology to obscure the recognition of how the patterns of everyday life, even new technologies, involve the re-enactment, renewal, and extension of traditions handed down from the past. A cultural/bio-conservative understanding of the temporal dimensions of culture involves a more complex understanding of the continuities between the present, past, and future—as opposed to the liberal stance of looking to the future with the expectation that all the experiments with the symbolic foundations of culture and with the chemical basis of ecosystems will be progressive steps forward. In addition to recognizing the continuities of our embeddedness in culture, and culture's embeddedness in natural systems, a more complex understanding of the traditions of the dominant and minority cultures is necessary for assessing which traditions contribute to the viability of community patterns that do not have an adverse impact on the environment. Furthermore, as Keith H. Basso's book, *Wisdom Sit in Places* (1996) demonstrates, the importance of the intergenerational narrativizing of the experience of place, as well as developing technologies that incorporate the principles of ecological design (to cite two examples) cannot be determined as worthwhile or even carried out within the time frame of the individual's subjective judgment or the expert's theoretically based approach to problem solving. These forms of knowledge are accumulated slowly and refined in ways that take account of changes in natural systems—over generations of experience. As I have argued elsewhere (1995, 1997), this orientation toward carrying forward ecologically sustainable cultural practices and patterns is partly dependent upon a tradition of elder
knowledge, which is a form of transgenerational responsibility that had no place in the Industrial Revolution. It is seen as even less relevant in the Age of the Internet. But this form of cultural/bio-conservatism cannot be renewed if the educational process fails to maintain a balance between critical reflection, and an understanding the complexity of our embeddedness in traditions, on the one hand and the need, on the other, to assess and renew traditions on the twin bases of whether they contribute to an equitable and just community and have a minimal impact on the environment.

The words introduced here—"tradition," "community," "narrative," "elders"—refer to essential aspects of environmental education. They are also words that critics of environmental education will have difficulty reconciling with their ideology of the free market place, and of competitive individualism that, out of historical ignorance, they choose to call "conservatism." If environmental educators had better access to public forums, these Adam Smith/Ayn Rand pseudo-conservatives could be exposed by highlighting the destructive impact that has resulted from the commodification of knowledge, relationships, and nature—which is one of the transformative practices that began with the Industrial Revolution, and is now being globalized by the increasingly widespread dependence upon computers. Activities such as play, mentoring, nurturing, entertainment, relationships with nature, are being further commodified in order to yield the profits that will further stimulate economic and technological innovation that will, in turn, increase market opportunities. But the basic dynamic of this process is dependent upon a society of individuals who have no loyalty to community traditions and no deep attachment to place—that is a society of rootless individuals. Non-commodified relations and forms of knowledge, on the other hand, are expressions of community reciprocity and living traditions, and consist mostly of face to face relationships that do not result in more toxins being spread over the land and water, and the wasteful use of various forms of energy. Furthermore, these non-commodified forms of community do not depend upon the ethos of competitive and self-reliant individualism. Indeed, the presence of this ethos undermines non-economically based relationships. To summarize a key point, the non-commodified aspects of community life are important expressions of cultural/bio-conservatism that the critics of environmental education have no interest in conserving.

Because environmental educators do not have equal access to the media and to influential legislatures, I would like to suggest another strategy that is less confrontational. Actually, this alternative strategy represents a deeper and more sophisticated cultural approach to environmental education, and it can be carried out in areas of the curriculum that are not usually associated with environmental education. That is, it has the twin virtues of strengthening ecologically sustainable cultural patterns, while not attracting the
attention of the reactionary critics. If teachers have a clear understanding that introducing students to a deep understanding of culture needs to be framed in terms of what Mathis Wackernagel and William Rees call the "ecological footprint" (1996), they can introduce students to examples of transgenerational communication that involve elder knowledge, as well as examples based on modern assumptions and technologies--including computers. Teachers can also introduce students to a comparative examination of cultures that will help clarify for students how modern assumptions and technological developments have influenced the students' understanding of how they are embedded in traditions--which is the first step in the process of examining how traditions both empower and constrain. This will help establish the basis for understanding that viable communities are complex ecologies of reciprocal relationships and responsibilities that have co-developed along with changes in the environment over generations of time. Without this perspective on their connectedness to traditions, students are more easily swayed by the media into becoming consumers of the latest technological innovations or other fads. Cultural groups with a clear sense of their traditions tend to be more resistant to the spread of commodification--the Amish and indigenous American cultural groups being prime examples.

Teachers should also help students understand how the culturally based root metaphors constituted in the pre-ecological past continue to influence current ways of thinking and practice. Because of the widespread acceptance of the liberal view of the rational process as individually centered, along with the conduit view of language that is necessary for viewing thought as free of cultural influence, understanding how current thinking and material culture (including technologies) reproduce past forms of cultural intelligence, as well as the role of language in this process, are perhaps the most empowering and enduring contribution of formal education. As I have already written extensively on how language thinks us as we think within the metaphorical constructions of the language (1990, 1993a, 1993b, 1995, 1997), I will limit my elaboration of this point to the saying that if students understand how past forms of metaphorical thinking continue to exert an influence on how current relationships are understood they can then more easily recognize the pre-ecological ways of thinking that continue to represent the environment as a natural resource and technology as capable of over coming temporary environmental dislocations. This connection between the earlier metaphorical constructions of a cultural group and current patterns of thinking can be taught in different areas of the curriculum, and without being labeled as environmental education.

As many social groups are beginning to express an awareness that the forces of consumerism are undermining values and relationships essential to morally coherent
families and communities, there would be widespread support for introducing into the curriculum another set of issues that are critically important to an ecologically sustainable future. But instead of framing the discussion in terms of consumerism, which puts the primary focus on the unrestrained and easily manipulated buying habits of the public, the distinction should be drawn between commodified and non-commodified areas of community and individual experience. As mentioned earlier, turning relationships, skills, forms of knowledge, and nature itself into commodities that are bought and sold represented one of the most basic changes introduced by Industrial Revolution. Before this change, market activities were restricted to a specific space in the town or between towns, and often limited to certain days of the week. As the factory system extended the idea of the market to include all aspects of the community and the environment, and as economic relationships were represented as governed by a universal law or principle that had no limitations, the moral frameworks that previously held the commodification process in check were undermined. Today, every aspect of human experience and, now, even genetic material are being commodified. And with the commodification of such activities as play, healing, education, mentoring, and craft knowledge, there has been a corresponding increase in the disruption of natural systems that has resulted from the misuse of natural resources and creation of toxic wastes. The concept of commodification opens up for discussion a wider range of cultural assumptions and technological practices, and it also establishes a conceptual framework for focusing on the more constructive side of a cultural approach to environmental education. This involves identifying within the dominant and minority cultures the various forms of non-commodified relationships, activities, and forms of knowledge that contribute to the viability of community life, while at the same time having a low impact on the environment. As the students begin to carry out a cultural inventory of non-commodified dimensions of individual and community life, and to consider the impact on the community and environment of the technological and economic forces that are continually transforming the non-commodified areas of community into niche markets, they will be learning about the cultural characteristics of ecological sustainability. A comparative analysis of the extent of commodification between the dominant and minority cultures will also open up important questions about social justice, and the dangers of technological colonization. It will also help students understand the complexity of tradition, transgenerational communication, the role of elders, and the power of metaphorical thinking to reproduce earlier forms of cultural intelligence within the context of considering the characteristics of sustainable human and biotic communities. Students might even be able to understand the dangers present in globalizing the technologies that further the process of commodification, as well as recognize how the educational process
is contributing to this process. The role that computers play in commodifying nature and
globalizing markets might even be considered. Parents who might be critical of classroom
discussions about the importance of saving old growth forests, and about animal rights,
are likely to be more supportive of their children understanding why jobs are relocated to
regions in the world that pay the lowest wages, and to understanding why so much of
their budget goes for expensive toys, entertainment, healing, and other activities
previously taken care of as part of the non-commodified commons.

The strategy of challenging critics to clarify what they want to conserve, as well as
the strategy of giving them scientific data on the degraded state of natural systems,
should not be ignored. But the strategy that is more likely to succeed, particularly in
states enacting legislation limiting environmental education, is the one that focuses on the
different aspects of culture that students need to understand in order to judge the
difference between sustainable and unsustainable cultural patterns. As students learn,
first of all, to recognize in their own and other communities the technologies that
incorporate the principles of ecological design, secondly how to participate in renewing the
wisdom of local elders, and finally the differences between commodified and non-
commodified relationships, as well as other aspects of a cultural/bio-conservative
approach to environmental education, perhaps we will have less need for eco-
management--and fewer critics.
References


