

**Educational Reforms that Address the Silences**

**By**

**C. A. Bowers**

**2007**

**Contents:**

**Preface**

**Chapter 1 Short Essays for Deep Discussions**

**Chapter 2 A Guide for Faculty Workshops on How to Introduce Cultural  
Commons and Eco-Justice Issues into Their Courses**

**Chapter 3 Why a Critical Pedagogy of Place is an Oxymoron**

**Chapter 4 Understanding the Connections Between Double Bind Thinking and the  
Ecological Crises: Implications for Educational Reforms**

**Chapter 5 Re-Thinking Social Justice Within an Eco-Justice Framework**

**Preface:**

These essays address the current silences that characterize most of what is being written about educational reform. The silences are a dominant characteristic of environmental educators who largely ignore the taken for granted cultural patterns of thinking and behavior that are contributing to the cultural crises—as well as the nature and importance of the world’s diverse cultural commons as representing pathways to a post-industrial future. The silences are also a dominant characteristic of educational reformers who are concerned with social justice issues related to class, gender, and race. The silences in the thinking of curriculum theorists can be attributed to their inability to escape the limitations of the theory frameworks they acquired in their years of graduate study where their professors reproduced the theory frameworks passed on by their professors. The silences in the writings of educational philosophers as well as educational psychologists similarly reproduce the silences in the mainstream literature that informs their educational extrapolations. The silences are now becoming especially noteworthy as other sectors of society are beginning to think about the need to align daily practices with what they understand as contributing to a sustainable future. Religious groups are beginning to make the turn toward environmental stewardship, as are certain corporations. Within local communities there are networks that are carrying forward the intergenerational knowledge and skills that represent alternatives to the consumer dependent lifestyle that is still being promoted in public schools and universities. Within these institutions, the tradition of possessive individualism and the quest for constant change make the effort to introduce radical cultural reforms largely futile. Everybody has to have their own ideas, and the culture of learning and discourse fostered in these institutions represents the highest responsibility as that of criticizing all ideas and expressing one’s own ideas. This ensures that the possibility of dialogue is always transformed into individual monologues. Even this limited capacity is now being seriously undermined by the dumbing-down of computer mediated learning and by the growing addiction of Americans, young and old, to playing computer games. The challenge now is how to engage their avatars who occupy limitless possibilities of cyberspace where imagination never encounters ecological limits.

These essays represent yet another attempt to provide a basis for dialogue about the nature of educational reforms that address the cultural roots of the multiple ecological crises that are now spreading around the world. But they are being reproduced here without any illusions that educators, regardless of level of engagement, will be able to throw off the interpretative frameworks still reinforced within their disciplines and subject areas, and that were acquired during their most vulnerable phase of their own education. For the few people who will take these essays seriously I am grateful, and I hope they will ground themselves even more deeply in the literature that highlights the formative influence of the language/culture/thought connections, and the intergenerational knowledge and skills that represent the culturally diverse world we live in. I also hope they find some way to sustain their commitment and energy in a community where silence and criticism for the sake of criticism have been subordinated to an awareness what is of primary importance to achieving a sustainable future. It will mostly have to come from within and from a few colleagues who share similar concerns--and who make the effort to ground themselves in the traditions of cultural practice and thinking that have been largely marginalize by those who continue to promote the form of

consciousness that has been a major contributor to the crises we face. Silence undermines the possibility of dialogue, but it does provide the space for thinking more clearly about the double binds between our embodied experiences and the cultural myths that continue to propel us toward ecological disaster.

## **Chapter 1 Short Essays for Deep Discussions**

*The following short essays are part of a series written for a blog sponsored by a social justice organization, and were originally intended for a general audience. As the proposals for sustainable educational reforms, as well as the analysis of sources of resistance, may contribute to a more vigorous discussion of educational reforms that address the deepening ecological crises, they are being reproduced here. The shortness of the essays may make them useful for classroom discussions of key issues related to understanding the nature of the cultural and environmental commons, how they are being enclosed by ideological and market forces. While many of the references are to American higher education, the essays raise issues that are relevant to any country where universities reinforce the cultural assumptions that were constituted before there was an awareness of environmental limits, and where universities have marginalized the nature and ecological importance of the cultural and environmental commons.*

### **Essay #1 An Overview of the Silences and Double Binds that Limit an Understanding of Ecologically Sustainable Educational Reforms**

The environmental and social problems we face have increasingly ominous implications for the future. In addition to global warming, the amount of carbon dioxide released into the atmosphere is changing the chemistry of the world's oceans—which further threatens the food chain we depend upon. The shortage of potable water and loss of top soil, which are just two of many environmental changes taking place, will further add to the misery of an increasing world population. The social problems are equally daunting—especially in America where a combination of market-liberal and Christian fundamentalism has become the dominant political force. Computer-driven automation, outsourcing of jobs to low-wage regions of the world, and the disappearance of the economic safety nets that many workers previously took-for-granted, are reducing the ability of many people to meet their basic needs. At the same time the local cultural and environmental commons are rapidly being exploited as new markets by the industrial system of production and consumption. What few people recognize is that the commons, which include community-based mutual support systems as well as the intergenerational knowledge, reduce dependence upon a money-based existence. The increased use of surveillance technologies, the undermining of democratic institutions and civil safeguards, and the rise of a friend/enemy approach to politics at the local and national level, add to the list of daunting challenges faced by environmentalists, social justice advocates, and educational reformers.

One of the reasons for the environmental and political crises we now face is the market liberalism that gave conceptual and moral legitimacy to the global expansion of

the industrial/consumer-dependent lifestyle. Market liberalism is now the principal source of indoctrinating people into believing that the main pathway of human history is now a source of backwardness and a limitation on individual freedom. This pathway, which varies from culture to culture, is better known as the cultural and environmental commons. Most examples of the cultural and environmental commons encompass those aspects of daily life that had not yet been privatized and monetized. Another feature of the commons, as practiced in many cultures, is the reliance upon local decision making and an awareness that current practices should not diminish the prospects of future generations.

As I will explain in future essays, public schools and universities in the West have relegated knowledge of the cultural and environmental commons to low status by omitting it from the curriculum. The result is that many people lack the language for naming those aspects of the commons they participate in. In not being able to identify what they depend upon and experience at a taken-for-granted level of awareness, they are unable to resist the further enclosure of the commons that makes them more dependent upon consumerism. I shall also examine the nature of the linguistic double binds that lead current educational reformers to promote, in the name of individual freedom, the further emancipation from the commons sustaining intergenerational knowledge and mutual support systems. How the cultural assumptions reinforced by American professors in many disciplines contribute to large numbers of university graduates becoming die-hard supporters of President George W. Bush's market liberal domestic and foreign policies will also be examined. Perhaps the most difficult challenge will be to convince professors across the disciplines to take seriously reforms that contribute to the revitalization of the local cultural and environmental commons, and to learn how to build support within the community for living less monetized and environmentally destructive lives.

## **Essay # 2 Revitalizing the Cultural and Environmental Commons as Sites of Resistance to Economic Globalization**

In order to understand the criticisms I am making of our educational institutions, as well as recommendations for reform, it is necessary to clarify further the nature of the cultural and environmental commons—as well as the many ways they are being enclosed. I will also explain their importance to reducing the human impact on natural systems, and how participation in the cultural commons reduces dependence upon a money economy.

The key features of the cultural and environmental commons that need to be identified if we are to counter the criticism that “we cannot go back to a simpler past” and “any discussion of the commons is the expression of romantic and wishful thinking” include the following: (1) the cultural and environmental commons began with the beginning of human history; (2) they still exist in all of the world's cultures—including both rural and urban areas in the West; (3) access to the cultural commons varies with the culture's status systems and other forms of exclusion and privilege; (4) the cultural and environmental commons in many cultures were (and still are) managed through local democracy; (5) the first acts of enclosure of the commons can be traced to introduction of private property, a money-based economy, socially stratifying religious beliefs, and, more

recently, to a variety of cultural forces that range from public education, the nexus of science and technology, and the globalization of market liberal ideology.

The environmental commons, which are now being heavily impacted (enclosed) by the West's industrial culture, includes the soil, water, plants, animals, air, forests, oceans, rocks, gene lines, and so forth. Even the microorganisms being destroyed by pesticides (which is a form of enclosure) are part of the environmental commons. The enclosure of the different aspects of the environmental commons, that is, transforming what was freely available to all to what requires participating in a money economy, can be seen in such recent developments as the corporate ownership of aquifers, the patenting of gene lines, and the privatizing of public lands and minerals.

The cultural commons are difficult to recognize, as our participation in them is largely part of the taken for granted experience of everyday life. Awareness of their loss too often occurs after they have been enclosed --when it is too late to resist. For example, individual privacy was part of our taken for granted commons until we learned in the media that surveillance technologies are being used by the government and corporations. Examples of the cultural commons that still exist include the languaging processes that are learned when born into a culture. As the moral templates of the culture are encoded in the language they become part of the taken for granted commons—until they are challenged as wrongly constituted or enclosed by market-oriented values. In addition to the languaging processes, which include the spoken and written word, narratives, patterns of metacommunication, and the creative arts, the cultural commons also includes the intergenerational knowledge and skills related to the growing, preparation, and sharing of a meal, craft knowledge, healing practices, games, knowledge of how to greet a guest, civic traditions of rights and responsibilities—among others. In other words, the cultural commons includes all the non-monetized and non-privately owned knowledge, skills, and forms of relationships that are intergenerationally passed along. While there are many examples of the cultural commons that strengthen community interdependence and have a smaller ecological impact, there also are examples of the cultural commons that are unjust, based on ignorance, and that further degrade the natural systems that life depends upon.

Enclosure may be driven by an ideology, such as market liberalism which has as its goal the transformation of what remains of the cultural and environmental commons into markets. Enclosure may also take other forms—ranging from the use of seeds genetically engineered to resist the use of Round Up, and which encloses a wide range of the farmer's knowledge of local planting conditions, to the many forms of enclosure that result from relying upon computer mediated thinking and communication. Some forms of enclosure represent genuine contributions to improving the quality of daily life, while many others, such as the World Trade Organization's legal right to override (enclose) local decision making about a variety of health, work, and environmental issues, undermine further the self-sufficiency of the community. Enclosure can also result from the loss of the collective memory of the community. When schools and universities fail to introduce students to the stories of the religious wars in Europe that led the framers of the American Constitution to provide for the separation of church and state, and when the stories of the labor, feminist, and civil rights movements are no longer part of the curriculum, these silences leave students without the language and historical perspective

necessary for recognizing how the social justice gains of the past are currently being undermined.

Revitalizing the local cultural commons will not in itself reverse economic globalization. It may, however, contribute to slowing the process of environmental degradation and dependence upon a money economy that is failing millions of peoples around the world. As students become aware of the nature and importance of the cultural and environmental commons, as well as the different forms of dependencies that result from the enclosure of what was previously freely available, perhaps they will become more critically aware of what needs to be conserved and what needs to be reformed or changed entirely.

Participation in the cultural commons--from preparing a meal from a traditional recipe, learning to play an instrument, writing poetry, using local materials and craft skills in constructing a building, to organizing local resistance to the forces enclosing their civil rights-- fosters a values-based educational experience. When students go beyond classroom learning about the local cultural commons as well as their cultural diversity, including the different forms of enclosure, to participating in mentoring relationships they are discovering and developing personal interests and talents. They are also learning to be more self-confident in skill areas, to be mutually supportive of others, and to support the patterns of moral reciprocity within the community.

---

### Essay # 3 **How Universities Contribute to the Enclosure of the Cultural and Environmental Commons**

The same double bind that characterizes Enlightenment values and modern development is also present in Western universities. Universities are the source of many genuine achievements that have improved the quality of people's lives. However, when we weigh some of the achievements against the backdrop of global warming and recent changes in the chemistry of the oceans, as well as the ethnocentrism of Western foreign policies and the globalization of an industrial/consumer-dependent lifestyle, we are likely to wonder whether many of these achievements have put our collective future in greater jeopardy. The double bind of how some forms of success can have destructive consequences can be seen, especially in the United States, in how so many university graduates move from the classroom to becoming supporters of the market liberal domestic and foreign policy agenda of President George W. Bush.

At a later time, I will explain how the market liberal orientation of American students who mistakenly refer to themselves as conservatives is reinforced by the silences in their education, as well as by their social justice-oriented professors who share many of the same cultural assumptions that gave conceptual direction and moral legitimacy to the industrial culture that has entered its digital phase of development. But here I will focus on how the distinction between high and low status forms of knowledge (with the latter being largely left out of the university curriculum) contributes to the enclosure of what remains of the cultural and environmental commons. Several key points made in the previous discussion of the cultural and environmental commons include: communities that sustain their cultural and environmental commons rely upon the

intergenerational renewal of knowledge, skills and relationships that reduce dependence upon participating in the money economy; participation in the commons often involves local decision making that takes account of the prospects of future generations, as well as social and ecojustice issues; a vital cultural and environmental commons reduces dependence upon the industrial/consumer oriented lifestyle that is contributing to global warming. Because not all cultural commons are free of oppressive relationships, the traditions of our civil liberties and critical reflection need to be renewed.

Today it is difficult to identify any aspect of the cultural commons that is entirely free of dependence upon a money economy, or any aspect of the market system that is entirely free of traditions that are part of the cultural commons. The differences are marked by degree of emphasis and dependence. This also holds for universities. Yet the case can be made that most of what is now learned in university classrooms contributes to the expansion of the market forces that are further enclosing what remains of the local cultural and environmental commons—as well as integrating what remains of the commons of other cultures into the global economy. The evidence can be found in what universities have designated as high status knowledge—and in the prejudices and silences reinforced in philosophy, political science, and economics classes, as well as in such professional courses as business and education.,

High status knowledge is based on a number of cultural assumptions that go largely unexamined in most university classrooms. They include: (1) that the individual is the basic social unit, and thus source of ideas and values; (2) that change is a progressive force and thus is to be promoted; (3) that this is an anthropocentric world and the environment is an economic resource; (4) that print and other abstract systems of representation are more reliable than oral traditions; (5) that science represents the highest and most useful approach to knowledge; (6) that language is a conduit in a sender/receiver process of communication that enables “objective” facts and information to be sent to others; (7) that technology is both culturally neutral and the expression of progress; (8) that competition in the market place, on the playing field, and among academics separates the winners from the losers; and (9) that Western forms of knowledge and values are the most culturally advanced.

These assumptions are seldom made explicit and discussed in classes. Rather, they are reinforced as part of the interpretative frameworks that are taken for granted. Thus, they contribute to the silence that surrounds low status forms of knowledge and relationships—which in turn leave students without the language that will enable them to recognize and renew the cultural practices that strengthen the non-monetized traditions of community that have a smaller adverse ecological impact. One of the chief sources of the silence about the nature and importance of the local commons, as well as their cultural diversity, can be traced to the ethnocentrism that frames what is learned in many disciplines. If this ethnocentrism were not present, students might learn that the Western ideal of becoming an autonomous individual is based on a number of myths that have been carried forward in the metaphorical language taken-for-granted by the community. They might also learn that many cultures think of the individual in terms of intergenerational relationships and interdependencies—as well as being dependent upon the life sustaining ecosystems. Learning about the diversity of the cultural and environmental commons, including the non-monetized traditions within their own communities, would provide an awareness of the extent they rely upon intergenerational knowledge—such as the growing and preparation of food, the creative arts, craft knowledge, built environments, and the language of social and ecojustice,



If students lack the language necessary for making explicit how they rely upon different aspects of the cultural and environmental commons they will be less able to recognize and resist the different forms of enclosure by a market system that has no self-limiting guidelines. That is, they will be less able to recognize the transition from the mutual support systems within the community that are ecologically sustainable to becoming more dependent upon a money economy that is the basis of the industrial/consumer culture now threatening the sustaining capacity of natural systems.

Students need to develop a more balanced understanding of the importance of face-to-face communication, as well as the role that narratives play in passing on stories of injustices as well as advances in moral relationships. This might enable them to recognize how the increasing reliance on computers contributes to enclosing more of the cultural commons. Mapping the cultural and environmental commons of their local communities is also likely to contribute to a more complex understanding, even appreciation, of intergenerational traditions that lead to the development of personal interests and talents—as well as an enhanced sense of meaning and purpose that comes from the mutual support activities within the community. Through the experience of mentoring relationships, they may discover a different form of wealth than what is required in consumer relationships.

In effect, the double bind of promoting high status knowledge that supports the further expansion of the industrial/consumer dependent culture, while leaving students largely uninformed about how the commons represent alternatives to dependence upon a consumer lifestyle that is ecologically destructive, has another consequence that needs to be emphasized. Namely, local democracy as well as our civil liberties, which are essential characteristics of the cultural commons in the West, are being enclosed by university graduates who have turned the assumptions underlying high-status knowledge into a rigid ideology—which they mistakenly identify as conservatism.

#### Essay #4 **Rethinking the Deep Conceptual Foundations of Educational Reform**

As land conservancy groups, environmental scientists and other activists are already working to conserve what remains of the environmental commons the following short essays will identify the misconceptions that currently underlie the modernizing and ecologically unsustainable agenda of public schools and universities that are undermining the cultural commons.

Currently, there are four main approaches to pre-university education. These include home schooling, nationally mandated programs that integrate test-based educational “outcomes” with the supposed needs of the workplace in a global economy, classrooms where teachers promote the idea that students should construct their own knowledge (computer mediated learning is seen as facilitating this approach), and teachers who simply reproduce the way in which they were taught. At the university level, there are individual faculty in different departments who are addressing environmental issues; but the majority continue to teach and write as though global warming is not occurring. As a number of observers have noted, if there is a direction to the reform of higher education it is the closer integration between research and the interests of the corporate world. A criticism that can be made even of environmentally oriented faculty is that there is little evidence that the university’s role in promoting the

high-status knowledge that underlies the continued expansion of the industrial/consumer culture has changed—or even been seriously questioned. Ironically, the forms of knowledge left out of the curriculum, and thus relegated to low-status, happens to be what sustains the cultural commons that have a smaller adverse impact on natural systems.

The basic question that educational reformers need to ask is: If an increase in the level of consumerism is not a viable approach to slowing global warming, and if a combination of the present consumer dependent lifestyle and greater reliance on more efficient sources of energy and recycling in the home is not an adequate response, then what are the alternatives that will have a smaller environmental impact? I have suggested that revitalizing the cultural commons is the only alternative that reduces the level of consumerism and thus dependence on a money economy that is increasingly unreliable, and is destructive of human potential and of natural systems.

Educational reforms that reduce dependence upon an economic system driven by the market liberal ideology that has a global agenda will require more than simply adding ecological sustainability to the social justice liberal's long list of priorities. As I have pointed out in several books and articles, both the market liberals (who out of ignorance identify themselves as conservatives) and social justice liberals share many of the same deep cultural assumptions that the industrial/consumer culture is based upon. Thus, it is necessary to recognize that ecologically sustainable educational reforms both at the public school and university level will require fundamental changes in long held patterns of thinking, including the deep taken-for-granted cultural assumptions they are based upon.

Changes in these patterns of thinking will be difficult because the personal identities and the careers of classroom teachers and professors are based upon them. That these cultural assumptions are largely taken-for-granted makes them an even greater impediment to change. What needs to be addressed are the silences and prejudices currently reinforced in school and university classrooms. These include the ethnocentrism that is still present in the current emphasis on multicultural education and the combination of silences and prejudices that contribute to the indifference that most students exhibit toward ecologically sustainable practices within their local communities. This indifference toward environmental issues is partly a result of their being captives of media sponsored hyper-consumerism and the ability of technological innovations to provide instant self-gratification

Any serious approach to reforming education in ways that lead to lifestyles and communities that reduce our ecological footprint, as well as address social/ecojustice issues, must begin with questioning such key concepts as tradition, individualism, progress, liberalism, conservatism, and a human-centered world. Understanding the historical misconceptions reproduced in how these concepts are currently understood and used, as well as understanding the implications of such new concepts as ecology and evolution are critical to whether we can change the Titanic mind-set that is currently on a collision course with global warming and the other degraded systems we depend upon.

The starting place for aligning our guiding concepts (which need to be understood as metaphors within an historically layered system of root and iconic metaphors) is to recognize the misconceptions about the nature of language still perpetuated in both schools and universities. The primary misconception is that language is a conduit in a

sender/receiver process of communication. This view of language is essential to sustaining other myths, such as the widely held idea that the rational process is uninfluenced by the assumptions of the culture, that there is such a thing as “objective” knowledge and data (as though knowledge and data at different points in their origin do not begin with culturally influenced human observation and interpretation), and that the individual has the potential (if given the right education) of becoming an autonomous thinker and moral agent. The conduit view of language also contributes to the lack of awareness that such words as tradition, individualism, progress, democracy, data, etc. have a history and that their current meaning has been framed by culturally specific root metaphors—or to use a technical phrase, the meta-cognitive schema that operates largely at the unconscious level thinking. An example of how a schema (or interpretative framework) is reproduced in the languaging processes of a culture can be seen in how such supposedly cutting edge thinkers as Richard Dawkins and E. O. Wilson rely upon the same mechanistic model of thinking articulated centuries ago by Newton and Kepler. Other examples include how the mythopoetic narrative in the Book of Genesis continues to be the basis of thinking of a human-centered world and, until recently among segments of society, as justifying male domination.

In the next essay I will discuss the layered nature of metaphorical thinking that both illuminates and hides aspects of human experience, as well as how language carries forward the moral templates of the culture. In order to connect this discussion with the argument I am making for educational reforms that help revitalize the local commons as well as their cultural diversity, I will focus the discussion of how metaphorical thinking often carries forward the misconceptions of the past—and that the misconceptions that characterize the current understanding of individualism, tradition, progress, liberalism, conservatism, and evolution (at least its extension to include cultural memes) contribute to the current silences and prejudices that inhibit the students’ ability to recognize the sustainable characteristics of the cultural and environmental commons.

## Essay #5 **What Al Gore Missed: The Ecological Importance of the Cultural Commons**

The recommendations for reducing consumerism that appear at the end of Al Gore’s book, An Inconvenient Truth, represent how language may contribute to enclosing the cultural commons. No one can deny that Gore’s list of behaviors for reducing consumerism is sound common sense. But a list of what thoughtful people are already doing, such as buying things that last, composting, buying local, and bagging groceries in a reusable tote bag, is no substitute for suggesting a more radical approach to reducing our dependence upon the consumerism that is contributing to global warming—which his book documents so well.

Gore does not mention the diversity of the world’s cultural commons, and how the intergenerational knowledge, skills, and mentoring relationships that are the basis of many of these commons represent community-centered alternatives to being dependent upon industrial food, entertainment, agricultural practices, healing, and other aspects of daily life that have been monetized. Gore’s silence about the ecological importance of the cultural commons should not be taken as a sign of his disagreement with this pre and post-industrial pathway of human history. A more plausible explanation is that his formal

education failed to provide the language necessary for making explicit the local cultural commons-based experiences that are largely taken-for-granted. As most people reading his list of consumer-reducing recommendations are likely to be unaware of the importance of the cultural commons he overlooks, the question arises about the culpability of our public schools and universities. If the educational process does not provide students with the language necessary for naming and thus making explicit the cultural commons they will otherwise take-for-granted, they will be less likely to recognize when different aspects of the commons have been enclosed by market forces, and by a government moving closer to equating resistance to the market liberal agenda of economic globalization with terrorism.

The formal education of most Americans has left them in the double bind where participation in the daily practices and relationships of their local cultural commons have been relegated to the area of conceptual silence, while the language that is reinforced in public schools and universities is the language of the market place, technological innovation, expert systems, and media hype. Evidence of how widespread the public's inability to name the different aspects of the cultural commons, and to explain why they are important in terms of the narratives that are often (but not always) sources of moral guidance, traditions of civil liberties, and skills and mutual supportive relationships that are alternatives to consumerism can be found by asking classroom teachers and most university professors what they understand about the nature of the cultural commons. I have found that most of them respond with blank stares to any attempt to discuss the cultural commons. A few books are now being written about the importance of the environmental commons, as well as many articles that examine how different cultures are managing what remains of their environmental commons. This renewed interest in the commons has not influenced what is being taught in public schools and universities, as they are still in the grip of linguistic traditions that were either silent about the cultural commons—or were prejudiced toward them. To take the cultural commons seriously is to identify with what universities continue to designate as low-status and as the source of superstition and backwardness.

As pointed out in a previous essay, the metaphorical nature of language carries forward over many generations the analogs that prevailed at an earlier time of metaphorical thinking of how to understand something new. An example is the way in which E. O. Wilson and Richard Dawkins continue to reproduce in their writings the misconceptions of Newton and Kepler who assumed wrongly that all aspects of life could be understood as having the same properties as a machine. Few professors and even fewer classroom teachers understand how the metaphorical nature of the language they rely upon carries forward the misconceptions of the past. Unfortunately, many of these misconceptions are responsible for the silences and prejudices that characterize many people's relationships with their local cultural commons. In recent months we have witnessed important aspects of the cultural commons, such as the traditions of habeas corpus and the right to privacy, being enclosed with little or no reaction from the general public. Narratives of social justice struggles, as well as ethnic traditions related to the sharing of food and mutual support, are also being enclosed by the increasing reliance on technologically mediated communication and entertainment (e.g. cell phones, iPods, computer gaming, etc.).

If we examine the ideas, silences, and prejudices of influential thinkers in the West, such as Plato, Descartes, Locke, Smith, Spencer, and more recent philosophers, we find that they viewed local knowledge as a source of backwardness. They shared a prejudice that marginalized the knowledge systems of other cultures—which also reduced the possibility that we would understand the ecological importance of their cultural commons. What Plato, Descartes, and Locke reinforced is that there is nothing to be learned from traditions; and they, along with Smith, Spencer and recent philosophers such as Richard Rorty, reinforced the idea that words have universal meanings—quite separate from their cultural context. In effect, these early philosophers and political theorists elevated the use of abstract language over the vernacular languages built up over generations of place-based experiences. This legacy of abstract language and thinking is now used to justify the enclosure of the cultural commons around the world. This abstract language includes such words as individualism, private property, free markets, critical inquiry, progress, competition—which is the vocabulary of market liberalism. This liberal vocabulary is based on cultural assumptions still reinforced in most university courses. What this vocabulary marginalizes are the words essential to understanding the nature and importance of the cultural commons as representing alternatives to economic globalization. This alternative vocabulary includes a more culturally informed understanding of tradition, conserving an intergenerationally connected form of individualism, non-monetized activities and patterns of mutual support, moral reciprocity between the human and non-human world. It is, in essence, the vocabulary of connectedness and interdependency that is basic to how we participate in our local cultural and environmental commons.

Another way in which the language reinforced in our educational institutions contributes to the silence found in Gore's list of recommendations is that, contrary to the conduit view of language, the languaging systems of a culture reproduce its moral templates. Thus, learning the language of the culture also involves acquiring the moral templates shared by other members of the culture. Languaging processes are about how relationships should be understood and morally conducted. Key to this process is how words encode what is understood by members of the culture about the attributes of the participants in the relationships. To make this as simple as possible, if the word "woman" is understood as not having the attributes of intelligence and strength, then the moral code of the culture allows treating women as inferior to men. If the words "weed", "wilderness", and "desert" are understood as lacking positive attributes, then it is morally sound to eradicate the weed, exploit the wilderness, and to use the desert as a toxic waste site. The fate of the cultural commons has similarly been influenced by the moral templates reproduced in the high-status vocabulary reinforced in our educational institutions. If the phrase "cultural commons" has no discernable positive attributes, then it has no moral standing—and attention will be focused on the language that identifies the many manifestations of material progress—even though this form of progress is undermining the ecosystems that we and future generations rely upon. Gore's oversight must not be viewed as his failure to learn from his professors; his failure is in taking them too seriously and in reproducing their silences.

The next essay will focus on how the educational uses of computers contribute to undermining the cultural commons, as well as the ability of teachers/professors to help students acquire the communicative competence necessary for resisting the forms of

enclosure that lead to further degrading the environment and for reforming the traditions of the cultural commons that are sources of injustice.

## Essay # 6 **How Public Schools and Universities Can Contribute to Reducing Consumerism**

Earlier essays discussed the nature of the cultural and environmental commons as well as how universities establish what constitutes high-status knowledge—while at the same time relegating to low-status the face-to-face, intergenerational and largely non-monetized knowledge and relationships that are part of every local cultural commons. The many environmentally oriented courses now offered in most universities also deserve comment before I suggest the direction that educational reform needs to take if it is to rectify the silences in Al Gore's thinking about how to reduce consumerism. Most departments in universities now offer environmentally oriented courses where students may study the history of environmental thought, eco-criticism, environmental ethics, environmental sociology, religion and ecology, and so forth. These courses, as important as they are, share a common limitation; namely, they are taught within the conceptual framework of the professor's academic discipline.

A major limitation of this approach is that none of the academic disciplines have made the cultural commons the main focus of study. That is, few if any focus on how people can live less consumer dependent lives, and how conserving the world's diversity of cultural commons is essential to living in a sustainable relationship with the natural systems. There is a similar lack of focus on the different forms of enclosure that range from the introduction of new technologies, modernizing ideologies, to religious fundamentalism. The promotion of high-status knowledge, with its emphasis on reinforcing the same cultural assumptions that gave conceptual direction and moral legitimacy to the industrial revolution that is now being globalized, has resulted in universities being major contributors to the environmental crises. Unfortunately, many of the professors who are addressing environmental issues within the conceptual framework of their discipline still promote these deep, taken-for-granted cultural assumptions about individualism, the progressive nature of change, the ethnocentrism implicit in their view of the rational process and critical inquiry as the one true approach to knowledge, and the conduit view of language.

These assumptions are also responsible for the misrepresentations that impede the ability of most students to recognize the ecological importance of the local cultural commons—and the different forms of non-monetized wealth that accompany the discovery of personal interests and talents, participating in mentoring relationships, and in becoming more intergenerationally connected and responsible. Unless they are part of a religious and ethnic group that values traditions as essential to their identity and sense of community, most students will leave the university with the idea that traditions are impediments to progress. And most will take-for-granted the assumptions that underlie both market and social justice liberalism—with few being aware of the traditions of conservative thinking that underlie the checks and balances system of government, the Constitution, and that there is a connection between thinking of Edmund Burke and Wendell Berry. Indeed, most students will reproduce the formulaic thinking of their professors that leads to labeling the market liberalism of President George W. Bush and think tanks such as the American Enterprise Institute as conservative. Nor will they recognize the importance of asking what these faux conservatives want to conserve

---

The following is a brief introduction to the educational reforms that need to be undertaken if future graduates are to avoid the naïve thinking found in Al Gore's recommendations for reducing consumerism. As the limited space here allows for only an overview of these reforms; if anyone is interested in a more extended discussion they should go to <http://cabowers.net/> and click on Handbook. The basic focus of educational reforms should be to educate students to understand the differences in how the local cultural commons and the industrial/consumer culture impact natural systems—as well as how they influence community traditions of self-reliance and mutual support. That is, educational reforms need to help students understand how the different aspects of the local cultural commons enable them to live less money dependent and less environmentally destructive lives. They also need to learn about why the diversity of the world's cultural commons are sites of resistance to the forces of economic globalization that are adding to global warming.

What is critically important at this time is for students to acquire the background knowledge that will enable them to recognize what is being lost when different traditions of the cultural commons are being undermined by economic and ideological forces. That most students, as well as adults, participate in their local cultural commons at a taken-for-granted level of awareness creates a special challenge for classroom teachers and university professors. In addition to being able to make explicit the largely non-monetized activities and relationships that are at the center of community life, classroom teachers and professors also will need the background knowledge necessary for helping students to become explicitly aware of the differences in their experiences as they move between the non-monetized and monetized sub-cultures. That is, as mediators they need to help students recognize the differences between food prepared in accordance with traditional recipes and industrial prepared food, between volunteering in a community project and working in a highly structured job, between developing their own creative talents and purchasing a commercially produced artistic creation, between the experience of being free of constant surveillance and being under constant surveillance, between the experience of being innocent until proven guilty and the possibility that because of a mistake in identity one might be imprisoned without legal recourse. These are only a few of the fundamental differences between the cultural commons and market-oriented culture that need to be clarified.

However, it is not just a matter of recognizing differences. Rather, the teacher/professor's role as a mediator also includes encouraging students to make explicit and thus name the differences in how their experiences in the two sub-cultures influence the development of their personal talents, the nature of their relations with others, as well how the experiences in the two sub-cultures influence their sense of empowerment, dependency, and social justice. Just as feminists became empowered when they began to name the different expressions of gender bias, being able to name what is otherwise experienced as the taken-for-granted is the first step to becoming communicative competent and thus to revitalizing local democracy as a key element in the local cultural commons.

Mediating between the students' experiences means helping students examine the practices in both the non-monetized and monetized sub-cultures in terms of what contributes to an ecologically sustainable future. Some of the achievements of the industrial culture will be recognized as worth retaining while others, such the patenting of gene lines and the creation of "terminator seeds" will be seen as adding to poverty and as environmentally destructive. Similarly, there will be aspects of the cultural commons that need to be reformed or rejected entirely.

---

The focus on what is sustainable also requires that the public school teacher and university professor be able to clarify the historical and ideological forces that underlie the various forms of enclosure that turn the cultural commons into commodities and expert services that require participating in the money economy. Learning about the tensions and interdependencies between the two sub-cultures students participate in on a daily basis is profoundly different from an education that introduces students to the abstract knowledge that is too often based on the intellectual interests of their professors or designers of curriculum materials. For example, because few philosophy professors have an interest in the cultural commons students are unlikely to learn how Western philosophers contributed to privileging a vocabulary that is largely responsible for the silences about the importance of the cultural commons and for the ethnocentrism that has prejudiced students to thinking that there is nothing to learn from other cultures about how to live more ecologically centered lives. Nor are they likely to learn from professors in other disciplines how other aspects of the cultural commons have been enclosed. As pointed out earlier, the prejudices inherent in the different disciplines frame what will be the focus of attention and what is marginalized. Our future prospects will depend in part on learning to renew the cultural commons that have been marginalized by most academic disciplines.

#### **Essay # 7 How the Educational Uses of Computers Undermine Learning About the Cultural and Environmental commons**

Before explaining why students need to understand the differences between computer mediated thinking and communication, and the face-to-face, intergenerationally connected relationships that are part of the process of renewing the cultural commons it is important to explain at the outset why computers should not be viewed as a culturally neutral technology. Like the use of other technologies, they select for amplification certain aspects of human experience, while reducing others. They can store, model, schedule, retrieve, design, monitor, and communicate information and data over vast distances, as well as perform many other useful functions. But they have serious limitations, such as being unable to reproduce embodied experiences, differences in cultural contexts, tacit understandings, the complex messages that are part of oral communication, the history of the analogs encoded in the language that appears on the screen, mentoring relationships. In addition to reinforcing a Cartesian way of thinking that privileges the individual's perspective and sense of agency, and its increasing influential role in bringing more of everyday life under constant surveillance by government and corporations, other limitations of computer mediated learning can be traced to the cultural assumptions of the people who write the software-- which often go unnoticed because of the way that print reinforces the idea that what appears on the screen is objective and factual.

In the short space allowed here I will focus on some of the positive characteristics of computers when they are used in classrooms and in online courses, and then discuss why computers undermine the classroom teacher's and professor's mediating role in helping students recognize the differences between their experiences in the cultural commons and in the industrial consumer culture they also participate in on a daily basis. In the upper grades as well as in university classes, the role of the teacher and professor continues much as before computers appeared on the scene. Assignments are expanded by using the computer a research tool that



provides access to a wider range of information—including already written papers that students can download and hand in as evidence of their own diligent efforts. When communication between the professor and student is online, computers change the relationship in fundamental ways. Online relationships have the advantage of marginalizing skin color, as well as the clothes and body language that communicate social classes and ethnic differences that sometimes are the basis of prejudicial judgments on the part of the teacher and professor. Computers also tend to make the relationship between students and teacher/professor less hierarchical, as well as freeing students to exchange ideas with each other—rather than with an authority figure standing in the front of the room. Ideas and questions can be exchanged without becoming part of the power relations that are communicated through the body language that is often misinterpreted and thus damaging to achieving mutual understanding of what is being discussed.

What may not occur to the professors, or to the administrators ever in search of new markets from which to draw students, is that the online courses represent a form of cultural colonization to the idea that education automatically translates into a higher material standard of living. The colonization to the industrial/consumer mind set takes two forms: that of educating students to taken-for-granted Western assumptions—including the assumptions that Western technologies and ways of thinking are the most progressive and enlightened in the world. The other form of colonization that online education promotes is the way it represents both directly and indirectly the knowledge, practices, and activities of the world's diverse cultural commons as the expression of backwardness—even though the cultural commons are, in many instances, a storehouse of knowledge about how to live the self-sufficient/less-consumer lifestyle that global warming will eventually force all cultures to adopt. Indeed, at all levels of the educational process, and in all cultures, the message is continually reinforced that computer mediated thinking and communication is essential to earning a living in the global economy.

In summary, when we begin to consider the relationships and forms of knowledge that are part of the process of mediating between the two different cultural orientations, we find that computers are extremely limiting. In comparing the limitations of computer-based learning to what is required when teachers and professors view their responsibility as mediating between the students' experience as they move between the two cultural orientations, we find the following: (1) As mediators teachers and professors need an in-depth knowledge of the local culture that others take-for-granted—including the taken-for-granted conceptual and materialistic moral foundations of the culture of consumerism as well as the moral traditions that are the legacy of social justice achievements that are part of the cultural commons.. (2) The mediating process also requires face-to-face questioning, sharing of insights, developing the language for naming what previously was the un-named and un-recognized part of experience, and the continual comparing of the abstract representations of everyday experience with embodied experiences. None of these requirements can be met by the experts who write the software, as they will be unable to represent accurately the local experiences, cultural contexts, and the characteristics of the bioregion. The best they can do is construct abstract scenarios and models that may replicate certain cultural patterns of decision-making—but they will still be abstract and thus reinforce the spectator and game-oriented mentality of students.

The use of constructivist theories to justify the increasing reliance upon computers is also problematic. Over the years, constructivist approaches to learning in the child-centered classrooms did not lead students to ask about racism and gender bias, nor were they concerned about the destruction of the cultural and environmental commons that were coming under assault by the new technologies and market forces. Learning about the skills and accumulated

knowledge connected with most cultural commons activities will be beyond the grasp of students who have been indoctrinated into believing that they can only find oppression and the stunting of their creative insights if they learn from the traditions of their community. The questions that should have been asked by the early progressive educators, and by today's proponents of constructivist computer-based learning are: Will reliance upon the students' immediate experience and insights enable them to learn about the medicinal characteristics of different plants, how to perform the skills connected with the building trades, how to prepare a meal that has the right nutritional ingredients, how to set up a loom and to play a game of chess, and the civil rights they should protect? Will they be able to recognize the political changes that characterized how other democratic societies allowed themselves to be transformed into fascist societies? What the constructivist-oriented classroom teachers will not do out of fear of imposing their knowledge on supposedly vulnerable students is to ask the important questions, and to introduce students to an understanding of the historical forces that continue to influence present ways of thinking. And this is exactly what the role of mediator requires—to ask the questions about the taken-for-granted and ecologically problematic aspects of the culture that few if any students have the background knowledge to ask. It is in knowing what the important questions are-- what taken-for-granted ways of thinking and experience need to be named and thus critically examined, what needs to be changed and what needs to be intergenerationally renewed--that makes the constructivist approach to teaching and learning so inadequate. Indeed, given the silences about the nature of the ecological crises that characterize the thinking of constructivist learning advocates, it would not be incorrect to say that their approach is an example of the culturally and ecologically uninformed leading those who lack the background for recognizing what is happening to the environment on a global scale.

Computer based learning provides access to important and to what is often misleading information, as well as a sense of an abstract community that reduces personal vulnerabilities. However, it can never be the basis for learning about the experiential differences between the cultural commons and a money dependent existence--or about the cultural roots of the ecological crisis that the computer, as well as the people who use it, are complicit in deepening.

---

### **Essay # 8 Western Philosophers, the Titanic Mind-Set, and the Upcoming Collision with Environmental Limits**

The changes occurring in the natural systems we depend upon-- from global warming to the changes in the chemistry of the oceans, and now to the rapid decline in plant pollinators--suggest that our problems are much deeper than relying upon outdated carbon emitting technologies. One feature common to all forms of environmental degradation is that these changes have been occurring over hundreds of years, with the rate of change accelerating in recent years. That is, the changes have been part of the environmental context within which people's lives have been embedded. Yet, with the exception of recent scientific reports and the efforts of environmentally aware citizens, the language that organizes people's ways of thinking (including the language reinforced in public schools and most university classes) continues to marginalize an awareness of local environmental contexts. It also marginalizes awareness of the differences between embodied experiences in the cultural commons and in the culture of industrially produced products and services. What will be addressed here is how the tradition of Western philosophy has contributed to the pattern of context free thinking, and to reliance on

metaphors that encode analogs that were constituted before there was an awareness of environmental limits.

The way Western philosophers contributed to a tradition of abstract thinking that is now putting us on a collision course with environmental limits deserves a more extended treatment than these short pages allows. Thus, readers may find it useful to read the chapter with a similar title in my online book, *CRITICAL ESSAYS ON THE ENCLOSING OF THE CULTURAL COMMONS* <http://cabowers.net/>. I shall touch on the features of key Western philosophers who contributed to the pattern of thinking that assumed that words, such as rationality, individualism, progress, freedom, development, etc., have a universal meaning that transcends different cultural contexts. Plato made a major contribution to this tradition of marginalizing the cultural and environmental contexts that have influenced the language and thought patterns of many non-Western cultures when he introduced the idea of “pure thinking” about a reality that is independent of experience and of the cultural and environmental ecology it is always embedded in—as Gregory Bateson argues. Plato also contributed to three other traditions that strengthened the Western prejudices and silences about the nature and importance of the cultural and environmental commons. These include his rejection of narratives and poetry as unreliable sources of knowledge, his arguments that indirectly marginalized the importance of intergenerational knowledge (traditions), his silence about the nature of other cultural ways of knowing (which were part of his cultural world), and the ways in which cultures degraded the environments they depended upon.

Descartes and Locke further strengthened the idea that intergenerational knowledge, which they understood as traditions, is an impediment to the efficacy of their respective approaches to knowledge. They also continued Plato’s silences about other cultural ways of knowing, and the dangers of degrading natural systems. If these examples appear unrelated to my argument that these philosophers, along with Adam Smith and John Stuart Mill (among others) contributed to the current tradition of relying upon an abstract vocabulary that continues to marginalize an awareness of cultural and environmental contexts, I suggest they read current philosophers such as John Dewey and Richard Rorty—and even scientists such as E. O. Wilson and Francis Crick. Readers should also examine how many current philosophers are aware of other cultural ways of knowing, the nature and importance of the cultural and environmental commons—and, most importantly, how the meaning associated with such metaphors as individualism, tradition, intelligence, conservatism, liberalism, progress, and so forth, are based on the analogs that were constituted during the period of Enlightenment thinking. This lack of awareness of the cultural commons also accounts for why philosophers have been so slow to recognize those aspects of the cultural commons that were (and continue to be) sources of injustice—such as the tradition of patriarchy, racism, cultural colonization, and the ecological crises.

This brief overview of the silences and prejudices that have characterized the tradition of mainstream Western philosophy brings us to the next question: namely, how can we begin to rely upon a metaphorical language that is informed by current analogs -- rather than the analogs derived from the thinking of Plato, Descartes, Locke and other philosophers taught in our universities? The problem is made more difficult by the fact

that current analogs are often misleading, and may have long-term negative consequences. For example, some prominent scientists now argue that cultures are also subject to the process of natural selection by claiming that cultural patterns are “memes” that must meet the same test of Darwinian fitness as “genes”. Their extension of the theory of natural selection provides a powerful analog for market liberals who claim that corporations should only be held accountable to meeting Nature’s test of survival of the fittest. Using the computer as an analog for how to think about the human brain is also profoundly misleading.

Gregory Bateson and Clifford Geertz provide two important insights that may contribute to a more accountable use of the metaphors that play such an important role in framing how we think and in determining what is being marginalized or relegated to the realm of silence. Bateson’s insight was about the nature of double bind thinking. Double bind thinking, as he explains, relies upon analogs formed in the distant past by thinkers engaged in earlier political debates, and who were unable to account of our current cultural and ecological context. Thus, the analogs derived from the ideas of classical liberal thinkers, which many of today’s market liberals, and even environmentalists, take-for-granted can be traced back to the analogs derived from the writings of Locke, Smith, and Herbert Spencer (who coined the phrase “survival of the fittest”). To cite yet another example, the metaphor “tradition” still carries forward the analogs of the early Enlightenment thinkers who associated traditions with the church, privileges of the aristocracy, and the Great Chain of Being that limited people’s opportunities. In effect, overcoming double bind thinking involves understanding that the language we use may carry forward the misconceptions of the past. Overcoming the problem of double bind thinking requires drawing from current experiences in the matrix of cultural and ecological patterns the analogs that will connect our political discourse and policies with the realities we now face—which means recognizing that progress (unlike the Enlightenment view) often introduces changes in other parts of the layered and interdependent ecological systems that may be destructive.

Geertz’ idea of “thick description” is also relevant to ensuring that our metaphors are based on analogs that take account of our current situation of living in a culturally and ecologically diverse world. Thick description involves considering all the background (history of previous relationships, memory, class and social status, gender issues, etc.) that needs to be taken into account in understanding the difference between an involuntary wink and the influences on and the purpose of the wink that is intentional. Thick description also needs to be used in identifying the patterns, history, political issues, and all the rest of the ecology of relationships and ideas that can serve as analogs for understanding such terms as individualism, freedom, progress, traditions, intergenerational knowledge, the commons, conservatism and liberalism, data, and so on. If we were to do a thick description of what it means to be an individual, free, to progress, to be a liberal or a conservative, and so on, that take account of the multiple layers of relationships and taken-for-granted traditions that are part of context and tacit dimensions of the experience commonly associated with these metaphors the question of which analogs would be the more accurate. Those derived from the Enlightenment thinkers or from the process of thick description? What examples would we come up with in terms of saying that our experience of being an individual is “like this” experience? Would the thick description also enable us to recognize that our

individualism is always part of a larger ecology of interdependent relationships—including the language derived from earlier non-ecologically aware theorists who ignored context, tacit understandings and the taken-for-granted nature of most culturally mediated human experience?

Western philosophers put us on the path of double bind thinking, and our universities continue to ignore that our context-free metaphors that are the basis of so much contemporary thinking need to meet the test of thick description—and that the process of thick description needs to include the ecological footprint of human behavior that is based on the analogs derived from the Enlightenment.

## **Essay # 9 Translating Theory into Ecologically Sustainable Educational Practices**

The previous essay explained how metaphors carry forward the analogs that are the source of double bind thinking today, and on how the process of thick description is essential to establishing current and more ecologically sustainable analogs, packed a lot into a few short sentences. Admittedly, the essay made for pretty dense reading. Nevertheless, it provides the conceptual framework for understanding why so much of what is learned in public schools and universities reinforces the same mind-set that continues to be a major contributor to the deepening ecological crises.

To review the chief characteristic of double bind thinking: it involves relying upon the analogs constituted in the distant past when there was no understanding of environmental limits, the nature and ecological importance of the cultural commons, the diversity of cultural ways of knowing and thus of their cultural commons. These analogs also carried forward what Enlightenment thinkers marginalized and fundamentally misrepresented as sources of backwardness: namely such words as tradition, conserving, intergenerational knowledge, community-centered technologies, etc. The role that thick description plays in overcoming how language based on abstract and long held analogs reproduces today the misconceptions of the past is the other key idea. An example of how words (metaphors) reproduce the misconceptions and prejudices of the past can be seen in how the word “Luddite” is still used today to dismiss people as being against technology. What the Luddites were really against was industrial technology that threatened their skills and the rhythms and interdependencies of community life. Examples of how thick description undermines the use of abstractions (that is words—metaphors—used today in a formulaic way) can be seen in the way feminists described the history of bias, exploitation, and marginalization. Thick description led to understanding the word “women” as having many possibilities and talents—and thus not limited to the stereotype that was encoded in the earlier formulaic use of the word. Thick description, in effect, problematizes the use of stereotypes that carry forward the analogs formed at an earlier time. Metaphors used today that are in need of being subjected to thick description include thinking of the brain as like a “machine” and operating on “software”, cultural patterns as like “memes”, and the “patriotism” that is being equated with supporting the President’s foreign policies of aggression.

The question now is why should the classroom teacher and university professor understand the nature of double bind thinking? And equally important, when should they encourage students to find more current and ecologically informed analogs by engaging

in a thick description of words whose historically derived analogs are otherwise taken-for-granted? Again, this may sound like a heavy-duty discussion that would only interest an academic; but the reality is that these relationships need to be understood if we are to take seriously Albert Einstein's observation that you cannot use the same mind-set to resolve the problems that were created by that mind-set. To put it more directly, classroom teachers and university professors need to help students identify current analogies that reflect both the cultural and ecological dimensions of daily experience. We need to stop relying on the past forms of intelligence now encoded in much of our language. The practical implications can be seen in the way feminists freed themselves from the patriarchal analogs that went unquestioned for centuries. The civil rights movement was also the outcome of this process of challenging how the dominant society relied upon the analogs from the distant past to justify the oppression and marginalization of African Americans—as well as indigenous cultures, and, now, various immigrant populations.

If students are going to learn about the community-centered alternatives that will enable them to live less consumer dependent lives, and to discover their own talents and future roles as mentors in an activity that is part of the cultural commons, classroom teachers and university professors will need to engage them in a thick description of the linguistic legacy of the Enlightenment thinkers who followed in Plato's footsteps of relying upon "pure thinking" that was divorced from local contexts, embodied experiences, and an awareness of human/nature dependencies. Nearly every aspect of the curriculum contains words that are part of the process of socialization where cultural context and the embodied experience of students are marginalized or relegated to the realm of silence. Examples may help here. Students who read or are told about technology are seldom asked to describe the ways in which different technologies mediate their experience—such as influencing their relationships with others, how they think, forms of dependency and empowerment, and so forth. Another typical example of how the meaning of a word is dependent upon an analog constituted in the distant past can be seen in how "community" is explained in third grade textbooks—as a place where people work, shop, and play. The thick description would bring out that community involves relationships with animals, plants, changes in weather, aesthetic experiences, awareness of the trails and sacred places of earlier inhabitants, and so forth. To cite another example, the title of the textbook, *Our World*, also carries forward an analog of the past that was based on the widely held root metaphor that represented humans as at the center of the universe and as in control of nature.

There are other metaphors that carry forward the misconceptions of Enlightenment thinkers that continue to be reinforced at all levels of public and university education—metaphors that make it more difficult for students to recognize the patterns of community self-sufficiency, interdependence, and ecological importance of the local cultural commons—which differ from culture to culture and from bioregion to bioregion. These metaphors include "individualism", "freedom", "liberalism", "tradition", "conserving" and "conservatism", "intelligence", "progress", "technology", "free-markets" and so forth. If students were to do a thick description of liberalism (which has its conceptual roots in the non-culturally informed theory-based thinking of John Locke, Adam Smith, and John Stuart Mill, etc.) they would find that the analogs associated with such words as freedom, individualism, progress, and a human-centered world, would

have to be radically altered in order to take account of how language carries forward and influences what and how the “individual” thinks, how she/he is dependent upon natural systems, how progress always involves unintended consequences and often leaves problematic traditions still in place, how different technologies mediate and thus are not a neutral tool, and so forth. Similarly, a thick description of the students’ experience of traditions (rather than relying upon the decontextualized analogs taken-for-granted in the formulaic use of the word) would encompass the whole range of daily experience that involve the re-enactment of patterns and ways of thinking that have been carried forward from the past. It took Edward Shils over 350 pages to describe the complexity of traditions. And he was not making an argument for traditions. Rather, he was doing a thick description of how traditions are carried forward as part of people’s taken-for-granted experience—as well as the misconceptions that lead people to be unaware of when important traditions, such as habeas corpus and privacy are being enclosed by other traditions like ideologies, market forces, and the drive to create technologies as total surveillance systems.

The key point here is that unless students are able to recognize how their thinking is largely dependent upon words (metaphors) whose meanings are framed by analogs constituted in the past (and are largely taken-for-granted today), they will continue to ignore the local cultural commons that need to be revitalized as alternatives to the consumer-dependent lifestyle that is exacerbating global warming and the other forms of environmental degradation. The double bind that is being perpetuated today results from the failure of classroom teachers and university professors to rectify the meaning of key metaphors. Many of these metaphors, and the analogs they encode, will continue to be taken-for-granted by classroom teachers and university professors—including the old assumptions that the techno-scientists will find a solution to global warming, and that progress will continue as long as people increase their level of consumerism and as market forces continue to enclose what remains of the world’s diversity of cultural commons.

## **Essay #10 A Guide for Classroom Teachers and University Professors**

Discussions of educational reforms that address how to revitalize the cultural commons as well as how to help students develop the communicative competence necessary for engaging in the political process of resisting various environmental and community forms of enclosure too often are met with indifference or a blank stare that indicates a lack of understanding. Why otherwise intelligent people are unable to recognize the community and ecological importance of the cultural commons can be traced to the way in which public schools and universities have relegated the knowledge and skills that sustain the cultural commons to such low status that they are left out of the curriculum. Thus, in order to discuss educational reforms that address how to revitalize the local cultural commons in an era of global warming and economic globalization, it is first necessary to have a clear understanding of the characteristics of the cultural commons and the different forms of enclosure. The following provides an introductory overview.

## Key Characteristics of the Cultural Commons

- The cultural commons represent the largely non-monetized and non-commodified knowledge, skills, activities and relationships that exist in every community.
- They are part of the intergenerational legacy within communities that enable people to engage in activities and relationships that are largely outside of the mainstream consumer, money dependent culture.
- The cultural commons are intergenerationally passed along through face-to-face relationships that may include mentoring.
- The nature of the cultural commons vary from culture to culture, with ethnic groups often sharing aspects of the cultural commons with the dominant culture as well as maintaining their own cultural commons.
- The cultural commons of some cultures may be the source of unjust social practices, while in other cultures the cultural commons carry forward the traditions essential to civil liberties and democratic practices.
- The cultural commons are the basis of local economies and systems of mutual support that contrast sharply with the market system that is driven by the need to create a demand for the constant stream of new products.
- Participation in different aspects of the local cultural commons enables people to discover personal interests, develop skills, and to engage with others in ways that strengthen the sense of community belonging and responsibility.
- The cultural commons, in relying upon non-industrial approaches to production and consumption, have a smaller adverse impact on natural systems.
- The activities and skills that are expressions of the cultural commons connect the generations in ways that are profoundly different from relationships that characterize relationships in a consumer-oriented culture. Moral reciprocity, receptivity to intergenerational learning and mentoring, and an awareness of what needs to be conserved as essential to community identity and self-sufficiency are more easily learned.
- Embodied experiences in the cultural commons are more likely to strengthen the propensity to cooperate rather than to compete, and to lead to identifying oneself more in terms of mutually supportive relationships and personal talents rather than as an autonomous individual who relies upon consumerism as the marker of success.



- The cultural commons strengthen the patterns of mutual support and face-to-face relationships with a broader segment of the community, and thus strengthen the practice of local democracy.
- The cultural commons are under constant threat from ideological, techno-scientific developments, and efforts of the market system to incorporate different aspects of the cultural commons into the market system—thus transforming what remains of community self-sufficiency into dependence upon the market and a money economy.

### **Examples of Intergenerational Knowledge, Skills, Practices, and Activities**

**Identified as the Cultural Commons:** (this list will vary from community to community, and between ethnic groups within the community)

- **Food:** Growing, preparing, and ways of sharing food. Includes knowledge of growing conditions, recipes for preparing food, traditions of sharing food that strengthen family and ethnic solidarity.
- **Healing Practices:** Intergenerational knowledge of medicinal characteristics of plants, traditions of providing different forms of support for members of the community that have physical and emotional problems
- **Creative Arts:** Various forms of dance, theatre, poetry, writing, painting, sculpture, photography that involve community participation, development of interests and talents, and are only minimally dependent upon the market system of production and consumption.
- **Narratives and ceremonies:** The narratives that are expressions of community memory ranging from sports, achievements in the area of social justice, exemplary individuals who have made major contributions and those who had a destructive influence. Ceremonies that celebrate important events, religious traditions, and so forth. Important to passing on the moral values of the group and strengthening ethnic, working class, religious and other forms of group identity.
- **Craft Knowledge and Skills:** Activities that combine aesthetic judgment and skill in working with wood, metal, clay, jewelry, glass. Produces both useful objects as well as provides for individual expression that has a transformative effect on the quality of everyday life that raises it above the banal, what is routine and taken-for-granted.
- **Games and Outdoor Activities:** Intergenerational knowledge, skills, and moral guidelines carried forward in various games ranging from playing chess, cards, to football, track, tennis, and other games. Also, includes hiking, birding, camping, and so forth. Many of these activities increasingly are becoming commercialized and thus are being transformed in community destructive ways.

- **Animal Husbandry and Care:** Intergenerational knowledge about the care, breeding, and uses of different animals—from sheep dogs, horses, to household pets. Encompasses a wide range of knowledge about sources of feed, habits and traits of the animal, to how to treat physical and other forms of disabilities.
- **Political Traditions:** Democratic practices, traditions that protect civil liberties achieved in the past, modes of political discourse, moral codes that govern political outcomes not dependent upon use of force and violence, protection of minority groups and points of view.
- **Language:** Vocabulary that illuminates and hides in terms of the culture's priorities and prejudices, may be a storehouse of knowledge of local ecosystems, frames different forms of social relationships, reproduces the misconceptions of earlier thinkers, may carry forward the wisdom of earlier times, essential to communicative competence, may be used by totalitarian forces to control consciousness and behavior, has a different cultural influence depending upon whether it communicated face-to-face or mediated through print and electronic modes of communication.

#### **Forms of Enclosure:**

- **General definition:** Enclosure involves transforming the cultural and environmental commons from what is largely shared in common, and subject to local decision making, into what is privately owned, part of the industrial/market economy, and where decision making is located outside the community.
- **Ideologies:** The tradition of market liberalism, with its emphasis on expanding markets and profits, private ownership, and on ignoring cultural differences, continues to be a major source of enclosure. Religious fundamentalism may also lead to different forms of enclosure such as civil liberties, narratives of achievements in the areas of social justice and environmental protection.
- **Technologies:** The mediating characteristics of different technologies contribute to various forms of enclosure—from the way computers enclosure (marginalize) the possibility of mentoring and face-to-face communication, the enclosure of privacy by surveillance technologies, the enclosure of craft knowledge by automated machines, to the bio-technologies that now make it possible for private ownership of gene lines.
- **Universities that Define What Constitutes High-Status knowledge:** By identifying what constitutes high status knowledge (which is based on many of the same deep cultural assumptions that underlie the industrial/consumer oriented culture that is contributing to the ecological crises) universities and colleges have relegated the various forms of knowledge that are the basis of the cultural commons to low status—with the result that few graduates are aware of the

complexity and ecological significance of the cultural commons of their communities.

- **Silences Perpetuated by Modern Forms of Development:** The emphasis on change, individualism, consumerism, personal happiness and interests (as well as the personal insecurities that accompany the modern industrial system of production and consumption) has resulted in social divisions where the younger generation is unaware of how participation in the local cultural commons may lead to discovering personal interests, the development of skills and talents, and a sense of community. Indeed, it would be more accurate to say that most of the younger generation is predisposed to reject the cultural commons as irrelevant. The older generations who have discovered personal fulfillment and ways of creative expression from participating in different activities within the local cultural commons too often remain isolated from the younger generation. What is being enclosed are the intergenerational continuities, which leaves the younger generation more dependent upon what the market can provide.
- **Economic Globalization:** Western traditions that are being universalized-- such as approaches to education, various uses of computers, science, English and other dominant languages, market system of production and consumptions, military domination, etc.,--are contributing to the enclosure of many of the world's languages and thus of the world's cultural commons. The result is that more people are becoming dependent upon consumerism and thus adding to the forces deepening the ecological crises

## **Essay # 11    The Practice of a Values-Based Education**

The readers in cyberspace have been very patient about not asking me to elaborate directly on the nature of a values-based education that would be consistent with Rabbi Michael Lerner's covenant. The previous essays have taken the reader on a wide tour of issues that are not usually discussed in thinking about educational reforms; thus, it is somewhat surprising that I have not received more critical comments. Having examined how universities promote the same high-status ideas and values that underlie the industrial/consumer oriented culture, how the metaphorical nature of language carries forward the misconceptions of earlier thinkers as well as the tradition of relying on words that are "context independent", and how the local cultural commons represent alternatives to dependence upon a level of consumerism that is a major contributor to global warming, it is now time to focus on educational reforms that will contribute to achieving the values that Rabbi Lerner has made the center piece of Covenant # 4.

The values Rabbi Lerner identifies as essential-- such as intellectual curiosity, emotional and spiritual intelligence, a commitment to freedom, justice, and peace--cannot be given more than lip-service by teachers/professors if the daily experience of students reinforces the values and uncertainties of the market place. The voice of the teacher/professor will

sound ritualistic in comparison with the daily pressures of working in repetitive and unfulfilling jobs, increasing personal debt, uncertainties of economic and food security, daily reporting of collusion between government and corporate interests, and the failures of an immoral imperialistic foreign policy. Social justice and environmental educators have attempted to reverse the ecologically and community-destructive slippery slope that has been a hallmark of America, but have had only minor successes. And even the minor successes, especially in the area of racial and gender equality, have failed to slow the rate of environmental degradation—which is now a world-wide crisis. In spite of their well intended efforts, teachers/professors have also failed to educate students about the community-centered alternatives to the hyper-consumerism lifestyle, as well as how the industrial/consumer-oriented culture undermines local democracy and traditions of community self-sufficiency. As mentioned in previous essays, few teachers/professors recognize that a major contributor to the current political, ecological, and moral crises is the hyper-consumerism promoted by the market liberal ideology, with its emphasis on ever increasing profits, expansion of markets, and exploitation of workers and consumers.

When teachers/professors become aware that reducing the level of consumerism is as essential, if not more so, than the adoption of more technologies that have a smaller carbon footprint, they then may begin to recognize that the small group of colleagues advocating for the renewal of community need their support if the current environmental, political, and economic trends are to be reversed. And when this realization is more widely accepted, they will find that curriculum reforms must be centered on introducing students to an understanding of the local cultural and environmental commons. the importance of maintaining the diversity of the world's commons, the economic, ideological, and technological forces that are enclosing them (that is turning what was previously a largely non-monetized relationship and activity into one that is monetized and subject to market forces). The values identified in the Covenant on values-based education can only be fully realized in face-to-face, intergenerationally connected communities where individuals discover personal talents, develop skills and the communicative competence essential to participatory democracy—and not in the market-centered existence where selfishness and competitiveness are essential to the “survival-of-the-fittest” ethos.

Educational reforms that focus on revitalizing the local cultural and environmental commons in rural and urban America will require that the taken-for-granted interpretative framework reinforced today in most classrooms about individual autonomy, the progressive nature of change, and a human-centered world will need to be examined critically. The curriculum should focus on the tensions existing between the traditions of self-sufficiency and personal empowerment found in most aspects of the cultural commons as well as the forms of deskilling, disempowering, and ecological degradation that is connected with being so totally dependent upon consumerism that has now entered its globalization phase. The overriding questions that should be addressed in the students' examination of different aspects of the cultural commons and the industrial/consumer culture include: How are relationships affected? Does the activity contribute to the development of personal talents and skills? Is it mutually supportive of others? Does it contribute to becoming less dependent upon a money economy? What

impact does it have on the natural environment? Does it diminish the prospects of future generations? Does it require the exploitation of others? Is the activity and the way of thinking it requires free of oppressive implications for others?

If these questions are considered carefully, rather than seen as a ritualistic check list, what should become clear is that a curriculum that is centered on the tensions between the cultural and environmental commons, and the industrial culture that is tireless in enclosing what remains of the world's commons, will focus on learning about relationships, and the connections between the language acquired in becoming a member of the language community and what is marginalized, silenced, and misrepresented. As pointed out in previous essays, the language learned in public schools and universities has marginalized the importance of being aware of the nature and importance of the cultural commons, the culturally non-neutral nature of technology, the ways in which language carries forward the misconceptions of earlier theorists who were unaware of environmental limits and different cultural ways of knowing. And it has reinforced the myth of the autonomous individual who is separate from the world that she/he observes and acts upon. A curriculum, which can be introduced in the earliest grades and developed in greater depth at the university level, that focuses on different aspects of the cultural commons, and in a comparative way on what the techno-scientific/industrial products that people have become dependent upon, brings into the foreground the inescapable nature of how the individual is embedded in multiple levels of relationships and interdependencies.

How does the conduit view of language influence whether embodied relationships are recognized and how does it affect whether the individual accepts responsibility for intellectual accountability and moral reciprocity? If words are accepted as having a universal meaning, rather than being context dependent, does this contribute to the individual being more susceptible to propaganda and an Orwellian political discourse? These questions, using age-level appropriate examples, can be introduced in the early grades by using the concept-shaping language that appears in textbooks and on the computer screen as examples. They can also be introduced at the university level where an historical perspective as well as differences in ideologies can be discussed.

The last essay contained a list of cultural commons activities, with each item on the list having many different forms of expression and depth of knowledge and skill. Each of these areas, whether in the areas of food, creative arts, craft knowledge and skill, democratic traditions, is under the constant pressure of enclosure—that is, being transformed from an intergenerationally connected and largely non-monetized activity into a product or service that requires participating in a money economy that is both environmentally destructive and increasingly unreliable as corporations downsize and outsource. In the case of our traditions of democracy and civil liberties, the process of enclosure is resulting in an increasingly authoritarian political system that relies upon surveillance, the increasing threat of being labeled as a threat to society, and loss of a checks and balance system of government. Learning the history of this aspect of our cultural commons as well as the history of the ideological and economic forces that lie

behind this gathering force will also contribute to empowering people, as well as their commitment to local communities, peace, and democracy.

In effect, every form of participation in the cultural and environmental commons—regardless of cultural group and rural, suburban, and urban setting—can be made the focus of what needs to be critically examined. In some instances, aspects of the cultural commons will be found to be in need of radical change, and in other instances there will be aspects of the techno-scientific based industrial culture that will be found to be beneficial to the life of the community—and essential to lowering the human impact on natural systems.

### **Essay #12 Teaching as Mediating Between Unsustainable and Sustainable Cultural Practices**

There are two certainties that need to be taken into account when thinking about educating for an ecologically sustainable future. First, cultural beliefs and practices, which vary from culture to culture, are major contributors to the ecological crises. The second certainty is that so little attention has been given to the cultural roots of the ecological crises that we do not always have a clear understanding of which beliefs and practices (including uses of technology) are part of the problem or part of the solution. In many instances, this dichotomous pattern of thinking also becomes part of the problem as some technologies, such as computers, are a constructive force in today's world while at the same time they contribute to economic globalization and to an even more extreme form of subjective individualism. These certainties need to be kept in mind when thinking of the classroom teacher's/professor's/parent's role as a mediator whose task is to help students become more aware of which cultural patterns and ways of thinking are ecologically sustainable—and which are not.

As discussed in earlier essays, most of the students' everyday experience involves participation in different aspects of the local cultural commons (e.g., food prepared according to traditional recipes, learning from parents how to take care of a minor physical problem, participating in a musical group, playing a game of chess, assuming that one's privacy is not being invaded by government or corporations, helping others in solving a problem or completing a task, etc). They also participate in various market/consumer dependent activities (eating at a fast food outlet, purchasing various items, driving a car, using medicines for a newly identified illness, working in various jobs, etc). Each of these activities also involve reliance on distinct vocabularies and a complex ecology of emotions, skills, and relationships. What is common to both sub-cultures that students daily participate in is that most of the patterns and ways of thinking are largely taken for granted. In being taken for granted, the students will be less aware of their ecological footprint, and less able to articulate why certain forms of enclosure of the cultural commons need to be resisted.

The mediator metaphor is particularly apt in terms of indicating that education should not be a matter of giving students answers and pre-determined ways of thinking that too often reproduce the misconceptions from the past. Rather, the role of the mediator is to

encourage students to make explicit the different dimensions of their experience as well as their ecological consequences. For example, encouraging students to name the differences in their experience of relationships, self-empowerment or dis-empowerment, what is marginalized or cannot be communicated, what contributes to a greater or smaller ecological footprint, etc., as they engage in print-based and oral communication with others, in learning to play a musical instrument and purchasing a CD, in sharing a meal with family and friends and grabbing a fast meal that has been industrially prepared, in volunteering in a community project and working at a job where the intelligence and skill have been built into the machine, assuming that one is innocent until charged and proven guilty and being pulled out of a line and questioned because of skin color, foreign name, and having one's name appear on an intelligence agency's list of potential threats to society.

The mediator's task is to encourage students to describe (that is, to attach words) to the relationships and patterns of their experience in the cultural commons that would otherwise be left as the taken-for-granted background to what they are explicitly aware of. The description, as mentioned in an earlier essay, would be what Clifford Geertz referred to as "thick description" or what can be called a personal bio-cultural ethnography. The key is in encouraging students to make explicit the complexity of the personal experience as well as the cultural history and patterns that have also influenced the experience. This can then be compared with their thick description of experiences in the market/consumer oriented culture. Learning to give close attention to cultural differences leads to developing the language necessary for exercising communicative competence—which is required in resisting the enclosure of different aspects of the cultural commons. What is common to nearly all forms of enclosure is the loss of skills, patterns of mutual support within the community, and local decision making. Ironically, the significance of these losses are too often represented as necessary to the achievement of more individual freedom and material progress.

The role of the mediator also includes encouraging students to investigate the forces that contributed to past forms of enclosure of the cultural commons--such as technological, scientific, ideological, linguistic, economic developments. Giving close attention to the differences between experiences in the cultural commons and in the market/consumer culture may lead to asking questions about which practice and tradition has the more adverse environmental impact. In some instances, it may be decided that what has been discovered and made available through the scientific/industrial system of production has made important contributions to the quality of everyday life; while aspects of the cultural commons may be found to be sources of social injustice. Before the thick description is undertaken, it is really not possible to judge what is more ecologically sustainable and enhancing of community. The layered nature of the metaphorical language that frames how members of the community think, as well as values encoded and unconsciously reproduce in the process of metaphorical thinking, are also part of the cultural commons. Many of the metaphors, as pointed out in previous essays, carry forward the analogs that were constituted at an earlier time by theorists who did not understand either the nature and importance of the cultural commons (often seeing them as backward), or the possibility of overshooting the sustaining capacity of natural systems.

Rather than accept the meaning of such metaphors as progress, individualism, tradition, conservative, freedom, and so forth, which are based on the analogs constituted in the distant past, the mediator should encourage students to do a thick description of their embodied experiences that accompany the use of these abstract metaphors. That is, could they describe the experience of being an autonomous individual without having to describe the network of constantly changing relationships and interdependencies with other people and with the many natural systems they are nested in? Would their description of the experience of autonomy also include the cultural patterns that are an inescapable aspect of how they express their supposed autonomy? Would the Enlightenment view of tradition, which is still held by many educators who view it as a source of backwardness and thus an impediment to progress, be understood differently if students were encouraged to do a thick description of the cultural patterns they re-enact on a daily basis—and that meet Edward Shils' understanding of a tradition as any aspect of culture that is passed along over four generations? Would the analog that leads to thinking of technology as a neutral tool hold up if students were to do a thick description of how the characteristics of the technology amplify certain aspects of experience while reducing others? Extending the mediating responsibility of the classroom teacher/professor/parent into the area of the metaphorical language that influences understanding relationships within the cultural commons and the industrial/consumer culture would help to ensure that the metaphors derived from the past would have less control over how the current cultural, moral, and ecological crises are understood and responded to. Albert Einstein made the point that we cannot solve the current crisis by relying upon the same mind-set that created it. This insight also applies to the problem of relying upon the old analogs encoded in the metaphors we rely upon today and that continue to frame our thinking in ways that do not take account of current political, cultural, and environmental realities.

In other words, mediating between cultures (the cultural commons, the culture of the industrial/consumer dependent lifestyle, and the cultures of the distant past) requires that we do not take the easy road of relying upon the formulaic use of language derived from a cultural and environmentally different past; but rather make the effort to align our language in ways that enable us to understand the relationships and interdependencies that are critical to our future survival as morally coherent and ecologically sustainable communities.



Once again an expert is proposing that technology should be used to promote, this time on a world-wide basis, the same mindset that has been a major contributor to the ecological crises that are already impacting millions of lives. The expert is Nicholas Negroponte who is a professor at MIT, and a highly visible proponent of providing the world's children with an inexpensive and rugged laptop computer. On the surface, his proposal appears highly laudable. It reflects today's conventional wisdom that computers improve both the effectiveness of the educational process and prepare students for the computer-driven workplace. Unfortunately, there are few voices raising important questions about the limitations of this increased dependence upon computer-mediated thinking and communication--particularly in educational settings in Western and non-Western cultures. While computers have facilitated many advances, it is important to recognize the limitations being ignored by Negroponte and other proponents of computer mediated education. They ignore these limitations largely for two reasons. First, they assume that computers are a culturally neutral technology that enables all cultures to progress. That is, they do not recognize how computers reinforce Western assumptions and ways of thinking. Secondly, they ignore that the diversity of world's local cultural commons represents alternatives to the consumer dependent lifestyle that is being globalized, and which is a major contributor to the ecological crises. As these are very complicated issues that our educational institutions still do not address, the following brief discussion should be understood as the starting point for a much needed dialogue

First, it is important to understand the nature of the cultural and environmental commons. Scientists are attempting to conserve the environmental commons—animals, habitats, and other natural systems-- from being totally integrated into a market economy. What is less recognized and understood are the cultural commons. As a storehouse of ever renewable intergenerational knowledge, skills, and relationships that exist in every community, they represent the traditions of self-sufficiency that reduce dependence upon consumerism to meet daily needs. These cultural commons, which vary from culture to culture, include the growing, preparing and the sharing of food, narratives, religious traditions, creative arts, craft knowledge and skills, ceremonies, patterns of mutual support, (and in Western cultures) traditions of civil liberties and the rule of law. The intergenerational renewal of the cultural commons is largely dependent upon mentoring and other forms of relationships that involve face-to-face communication, and that are heavily dependent upon local context and tacit understandings. While there are examples of the cultural commons that are environmentally destructive and are sources of injustice, most aspects of the world's diversity of cultural commons have a smaller ecological footprint. Industrial approaches to food, healing, entertainment, and meeting a host of other material and spiritual needs that are no longer met within the cultural commons of local communities require international transportation systems, power generating plants, and the extraction of natural resources that all lead to releasing more green houses gases and to depleting aquifers and other sources of water. The basic issue being highlighted here is that the cultural commons are intergenerationally renewed through face-to-face communication, mentoring, and context specific forms of learning—all of which lie beyond the technological capacity of computers.

Negroponte and other proponents of computer-based education ignore that making computers the central feature of education in the world's diverse cultures will have the effect of reinforcing the same mind-set that takes for granted that the industrial/consumer lifestyle is more progressive than the intergenerational knowledge that has been the basis of self-sufficiency of local communities. Granted, self-sufficiency too often involves a bare subsistence level of existence. However, the cultural commons in many subsistence cultures promotes a quality of life that is less environmentally destructive and that relies upon intergenerationally connected patterns of mutual support. What remains of the cultural commons in communities where the industrial/consumer-oriented lifestyle has become dominant represent the too often overlooked alternatives that exist largely outside of the money economy that now separates the rich from the poor. Negroponte and the other proponents of computer-based learning fail to recognize that the forms of knowledge and relationships that sustain the local cultural commons cannot be digitized without being turned into an abstract text. Mentoring, which involves voice (which is a complex message system), face-to-face relationships, contexts, memory, embodied experiences, and so forth are fundamentally different than the printed word appearing on the computer screen. The printed word simply cannot reproduce the complexity of knowledge, tacit understandings, memory, patterns of moral reciprocity that are part of embodied experience. Another problem unrecognized by Negroponte and other advocates of computer-mediated learning is that the languaging processes that sustain the intergenerational knowledge carry forward the deep assumptions of the cultural group. One of the limitations of computers is that it obscures that the words appearing on the screen have a history that reproduce, in many instances, the misconceptions formed in the culture's past, and that the cultural assumptions of the people who write the software programs are seldom made explicit. One of the consequences of computer-mediated thinking and communication is the reinforcement of the widely held myth that language is a conduit through which "objective" information, data, and ideas are passed on in a sender/receiver possess of communication.

As we can see in our own culture, youth socialized to the mind-set that takes abstract knowledge and representations of experience for granted, that expects technological change to be a normal aspect of life, that finds their sense of community more in cyberspace than in face-to-face relationships, also adopt other problematic attitudes and behaviors. They are less aware of traditions that sustain the local cultural commons, and thus are less inclined to consider the older generations as having any knowledge that is relevant to their lives. These traditions, such as how to be less dependent upon industrially processed food, upon the commercialization of health care, entertainment, and narratives are seen as backward. Other traditions that their progress-oriented mindset leads them to ignore are the importance of civil liberties, including habeas corpus. They also are likely to view as irrelevant how the different aspects of the cultural commons are being turned into new market activities, which increases dependence upon a money economy that is becoming less reliable as corporations downsize, outsource, and shed their moral obligations to fulfill long-standing agreements about retirement and health benefits.

When this same mindset, which is based on Western assumptions that do not take into account environmental limits and the need to be less dependent upon the industrial consumer-dependent lifestyle, is reinforced by the computers that Negroponte wants to share with the world's youth, we will see the further loss of local knowledge that people within subsistence cultures have relied upon for centuries. Youth will be left with the myths that promise access to a consumer-rich lifestyle, and freedom from the traditions of their community. They are also likely to adopt the form of individualism that computers promote, along with the current idea that moral values are subjectively determined—just as what they want to visit on the Internet is subjectively determined.

While promoting the idea that universal computer literacy will enable youth in the Third World to overcome a life of poverty, Negroponte and the other proponents of computer-mediated learning are ignoring how computers contribute to the further automation of the workplace and now the race to outsource work to low-wage regions of the world. Both of which reduce the need for workers. They also ignore that the loss of local knowledge and skills increases dependence upon a money economy that only a small minority of the world's population benefit from. The globalization of the Western consumer dependent lifestyle, as is happening in China, India, and other parts of the world, is exacerbating global warming and contributes to changes in the chemistry of the world's oceans that are an important source of protein for much of the world's population. If there is to be a post-industrial future that is ecologically sustainable, the world's cultural and environmental commons will need to be revitalized. Unfortunately, while giving every child a laptop computer will make the world more dependent upon computers, it also will undermine the forms of knowledge and intergenerational relationships that are the basis of a less consumer dependent lifestyle.

---

## **Chapter 2 A Guide for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses**

### **Reasons for Grass-Roots Initiated Educational Reforms**

There is now a consensus among the world's scientists that global warming, changes in the chemistry of the world's oceans threatening the bottom of the food chain, and the degraded state of other natural systems, are beginning to reduce the prospects of survival for hundreds of millions of people—and will cause major disruptions for the entire world population.

The Bulletin of the Atomic Scientists, the Stern Review published in Great Britain, as well as many other scientific groups, warn that the evidence of life-altering changes in the Earth's ecosystems indicate that we have only a few generations, if that, to alter the cultural practices that are major contributors to the environmental crises. One of the chief culprits cited for contributing to global warming, as well as to the acidification of the world's oceans, is the carbon dioxide emissions spewing from cars, industrial plants, and other human activities. While there is constant media coverage of global warming, less attention has been given to the fact that nearly half of the carbon dioxide emitted by industrial activity over the last two centuries is being absorbed by the oceans,

and the resulting changes in the chemistry of the world's oceans may have an even more devastating impact on the prospects of future generations.

The focus on reducing CO<sub>2</sub> emissions is prompting a rush among scientists and engineers to develop technologies that release fewer green house gases. Unfortunately, what is not being given adequate attention is the global spread of the consumer dependent lifestyle that requires the carbon emitting factories and transportation systems. As in the past, the current response to a crisis is to look for a technological solution. This limited approach ignores the more difficult challenge, which is to bring about a change in human consciousness that no longer equates consumerism with achieving greater happiness, personal convenience, and social status. The introduction of more energy efficient technologies will not, by itself, reduce the level of consumerism that has many major environmentally disruptive effects. Nor will the new technologies compensate for the loss of the intergenerational knowledge within many cultures that enable people to live in more self-sufficient ways—and thus to be less dependent upon what the industrial system produces and the expert systems that add to the dependency upon the money economy.

Scientists are warning that we are at a tipping point where, if fundamental changes are not taken within the next decade, global warming will accelerate to the point where human actions will become irrelevant. The increased acidification of the world's oceans are killing off many of the coral reefs that are home to approximately twenty-five percent of marine fish species, and the source of life at the bottom of the marine food chain (the zooplankton), is being adversely affected. The scarcity of potable water is similarly on the decline, and will accelerate with the melting of glaciers and with the continued over-pumping of aquifers. While the focus in recent months has been on global warming, the changes in the other ecosystems are already having an adverse impact on people's lives. Scientific reports generally cite the rate of change before the Industrial Revolution, and the rate of change that is now occurring. Clearly, the Industrial Revolution, and the consumer dependent lifestyle that is required for its further expansion, continue to be major contributors to the multiple ecological crises that the world's cultures now face.

Ironically, as we learn more about how the self-renewing capacity of natural systems is being degraded, public school teachers and university professors continue to reinforce many of the same cultural assumptions (such as individualism, progress, mechanism, and so on) that are the basis of current efforts to globalize the Western economic system. Outside of the sciences, a small number of faculty are using their disciplinary perspectives for introducing students to environmental issues. Thus, students may find courses in environmental ethics, eco-criticism, history of environmental thought, religion and the environment, environmental law, and so forth. These are important efforts, but they are limited in a fundamental way that goes unnoticed by these well-intentioned faculty. The major limitation is that there are no traditional disciplines that have made the history and diversity of the cultural commons the main focus of study—including how they were enclosed in the past, as well as the modern forms of enclosure. What is being studied is on the cultural and environmental margins of what is most in need of being understood, which is how to live more intergenerationally connected and less consumer driven lives. Missing from all levels of the educational process, and even from courses that address environmental issues from a disciplinary perspective, is an understanding of the cultural traditions of knowledge, skills,

relationships, activities that enable communities around the world to be more self-reliant—and thus to avoid the consumer-dependency trap that is the hallmark of modern cultures. Without this understanding students will not be aware of the local alternatives to the current market liberal efforts to globalize the West’s profit-driven system of ever escalating production and consumption.

That many faculty already assume that they are contributing to a greater awareness of how to be better stewards of the environment, as well as to an understanding of the misconceptions of the past that are responsible for many of the environmental problems we now face, creates a special problem. What is now needed is for the upcoming generation to understand the complexity and cultural richness of their local cultural commons, as well how the different forms of enclosure (monetization, privatization and silences) of the cultural commons are undermining both the traditions of self-government and the security that comes from not being so heavily dependent upon a money economy that places profits above everything else. The suggestion that the cultural commons, as well as how they are being enclosed, should be the central focus of educating for a sustainable future will be met by a variety of responses from faculty—ranging from incomprehension to a sense that they are already addressing important issues.

In conducting a workshop, it is important to remember that the disciplinary perspectives of faculty will influence the initial discussion of curriculum reform. Unfortunately, the disciplinary background of faculty too often results in the exchange of views that do not take account of what others have said, and too often end with nothing really accomplished in terms of addressing the main issue—which is how to initiate educational reforms that will lead to reducing people’s dependency upon consumerism while at the same time strengthening the self-reliance and local democracy of communities. One critic suggested that it was foolish to think that “ethical consumerism” would reverse global warming, while others have voiced concern that the commons were enclosed centuries ago, and that there is no point in discussing them now. The response from some faculty I have encountered at different universities is truly amazing, with the most egregious being the criticism that I am proposing that we no longer use technologies.

These comments, and even some that relied upon scatological language to express what they think of my proposals, bring out an important issue that needs to be recognized. Although classroom teachers and most professors in non-scientific and technologically oriented disciplines will be unable to contribute to the development of the energy efficient technologies, and to the retrofitting of our culture’s infrastructure, the one educational reform they can undertake, beyond the courses that now have an environmental focus, is to introduce students to the importance of conserving the linguistic diversity of the world’s cultures, and to learning how these diverse approaches to the cultural commons enable people to live less consumer dependent lives. That is, the major responsibility of classroom teachers and university professors is to help students understand the non-monetary sources of wealth that accompany participation in most activities of the local cultural commons. They also have a special responsibility for ensuring that students understand the historical forces—ideologies, religious traditions of thinking, technological developments, market forces, and so forth, that are threatening the further enclosure of both the cultural and environmental commons.

## **Why a Workshop is Needed**

My experience in promoting among faculty from different disciplines a discussion of educational reforms that address the revitalization of the cultural commons has led to the recognition that there are effective as well as totally ineffective ways of getting participants to move beyond the mind-set they bring to the discussion. Because the discussion of the nature of the cultural commons involves a different theoretical framework than most faculty are accustomed to thinking within—that is, a different understanding of language, of the nature of taken-for-granted patterns of belief and behavior, and of the nature and importance of intergenerational knowledge, it is vital that the conceptual organization of the workshop outlined here be followed—and that the person facilitating the workshop understands how to reframe the discussion so that learning about the cultural traditions that represent alternatives to a consumer-dependent lifestyle remains the central focus. Controlling the frame is not a matter of being authoritarian. Rather, it is a matter of recognizing when the discussion is drifting from the main theme, and knowing when to restate the main theme and then to help faculty recognize the connections or disconnections between their line of thinking and the main theme—which is to help students recognize the alternatives to consumer-dependent lives and to help them to develop the communicative competence necessary for resisting various forms of enclosure.

## **Order in Which Themes and Theory Should be Introduced**

Moving from a discussion of the nature of the ecological crises, and how current cultural practices are major contributors, to a discussion of educational reforms that reduce the current level of dependency upon consumerism also requires careful attention to the starting point of the workshop. It also involves knowing when the discussion of cultural practices needs to be supplemented by the introduction of theory that explains relationships and consequences that may otherwise go unnoticed. The discussion of local cultural practices is crucial to keeping the discussion from becoming abstract, which then makes it more difficult for participants in the workshop to recognize the changes they can introduce in their mediating role between the cultural commons and the culture of consumerism. In addition to suggesting the order of presentation of themes and theory, this handbook will include as part of the appendix short readings that summarize the relevant theory, as well as suggestions for showing videos that highlight the differences between more self-reliant and consumer-oriented cultures.

## **Theme #1 The Ecological Crises**

Before attending the workshop the participants should read the chapter at the end of Gore's book, [An Inconvenient Truth](#), on how to reduce consumerism. They should also be asked to read "The Darkening Sea" by Elizabeth Kolbert ([The New Yorker](#), November 29, 2006). These two readings are especially important to framing the central issue which is how to introduce educational reforms that will reduce people's reliance on consumerism. Gore's film, [An Inconvenient Truth](#), will lead to a wide ranging discussion of how global warming will impact different populations, habitats, species, local and national economies, and so forth. Kolbert's essay on changes in the food chain caused by the acidification of the world's oceans should also be brought into this discussion. It needs to be emphasized that these changes are not going to occur in some distant future, but are beginning to have an impact on lives, habitats and species today. It is critical that

the participants do not adopt the attitude that these are problems for future generations to solve.

The next phase of discussion should focus on whether science and technological innovations will be enough to slow the process of global warming, thus enabling people to continue to their current lifestyle of consumerism. The question to be asked is: will the introduction of more energy efficient technologies be enough to slow the process of environmental change so that the rest of the world can adopt the West's level of consumerism? After a short discussion of whether other cultures have the same rights as Western cultures to a middle class consumer lifestyle, the question needs to be raised about whether Al Gore's recommendations for reducing consumerism are adequate. His recommendations need to be assessed in terms of whether the cultures in India, China, and other countries adopting the Western model of economic development should simply follow them—or if something more radical is required to slow the environmental impact of the rising level of consumerism occurring in different parts of the world. As each of these issues can lead to seemingly endless discussions, it is important that the leader of the workshop summarize the different points of view, and then move the discussion on to the next sub-theme.

At this point in the discussion, the participants should be asked to identify the number of activities and relationships they personally participate in a single day that involve monetized relationships (that is when they are in the role of a consumer of services, advice, products, entertainment, and so on). They should also be asked to identify the different activities and relationships that were not monetized and part of the market system. This short-term ethnography will provide the basis for later discussions of the cultural commons—including why it is so difficult to be aware of how dependent the participants are upon them, why it is so difficult to be aware of when different aspects of the cultural commons are taken over (enclosed) by market and ideological forces—and to be aware of what the educational process marginalizes. It is important that these personal ethnographies be related to Gore's recommendations for reducing consumerism. The critical question is whether Gore is aware of how integrated into the market economy the everyday life of individuals has become. If the participants are not coached in what they should identify as examples of cultural commons activities and relationships that are part of their daily experience, their lists are likely to be short. This should be the starting point for introducing the next theme, which is the nature and ecological importance of renewing the local cultural commons—as well as resisting governmental policies that undermine the cultural and environmental commons of other cultures.

---

Appendix A “What Al Gore Missed: The Ecological Importance of the Cultural Commons”

---

## **Theme # 2 The Cultural and Environmental Commons**

- A. The discussion of the cultural commons should begin with an explanation about why the environmental commons are not the main focus. This is because faculty in the sciences are already addressing the environmental commons. As part of the explanation it needs to be pointed out that many environmental scientists are not aware that wrongly constituted cultural beliefs and values are major contributors to the degradation of the environment. It also needs to be pointed

out that Garrett Hardin's "The Tragedy of the Commons" is widely known within the environmental science community, but that few scientists are aware that Hardin's discussion of the enclosure of the commons is written from an ethnocentric way of thinking.

- B. Brief history of the cultural and environmental commons should next be introduced. Key idea: The practice of the cultural and environmental commons began with the first humans.** Initially, humans shared access to forests, water, animals, etc. on a non-monetized basis. The cultural commons were also part of daily life, which included the taken-for-granted rules governing who had certain responsibilities, who told the stories, how the dead were dealt with, and so forth. It was much later in human history that the concept of the commons was made the basis of the law. The Roman Institute of Justinian formalized three forms of the commons: the commons of the individual, the commons of the state, and the commons shared by all members of the community. The Magna Carta in 1215 reaffirmed the individual's free access to the environmental commons.
- Key idea: From early times access to the environmental commons was influenced by status and class distinctions, as well as by other cultural differences in how human/nature relationships were understood.**
- C. Understanding differences in cultural approaches to sustaining the commons needs to be recognized. Key idea: What is regarded as part of the environmental commons varies from culture to culture.** In short, there is no universal commons—but different cultural perceptions of what is included in the commons. At this point it would be useful to have the participants identify what is regarded as part of the environmental commons in their communities—also have them identify differences in how the commons are understood in different parts of the country. Many of these differences can be traced to historical developments. Examples include the establishment of water and grazing rights, introduction of technologies that enclosed (privatized the airways), etc. Just enough time should be devoted to the environmental commons to establish an understanding of key ideas about how cultural values and ways of thinking have influenced people's relationship to the environmental commons. Recent changes include the ability to patent (privatize) organic processes, including new technologies such as pesticide resistant plants, and so forth.
- D. The nature and importance of the cultural commons.** Even though people have relied upon the cultural commons since the beginning of human history, and established rules and taken-for-granted ways of understanding who had access and responsibility for the intergenerational renewal of the cultural commons (or ensuring that the cultural rules governing access to the cultural commons did not change), the concept of the cultural commons is of recent origins. However, laws, status systems (including class, race, and gender), and biases and silences that can be traced back to the mythopoetic narratives of the culture have influenced access, benefits, and marginalization of the cultural commons. **Key idea: Differences in cultural traditions have been major influences on whether the cultural commons contribute to ecologically sustainable and morally coherent communities—or whether they lead to the destruction of**



**the local ecosystems and to the exploitation of certain groups within their communities.**

- E. The cultural commons in local communities. Have participants identify what they think are examples of the cultural commons that they rely upon. It might be useful to divide the cultural commons into different categories, as this may help the participants to identify examples of the cultural commons that previously were not recognized as examples. The categories might include food, craft knowledge, language, use of technologies, narratives and ceremonies, creative forms of creative expression, moral/spiritual, and so on. **Key idea: The different expressions of the cultural commons are what have not been privatized, monetized, turned into a commodity or a service that is part of a money economy.** This criteria has to be modified at times in order to recognize that in many instances consumerism may be necessary--but limited to the point where it does not significantly reduce the development of personal skills and face-to-face relationships. As this qualification is an important one, and often a source of confusion, the group should discuss when limited consumerism is necessary in order to develop a personal interest and skill, and when consumerism limits personal development. Concrete examples of the difference between commons and consumer-centered activities should be identified, such as learning to prepare a meal according to a traditional recipe and eating at the local fast food outlet, learning to play an instrument and participating in a group musical effort versus paying to be entertained by others. In order for the participants to fully understand the differences, a number of other examples need to be identified.
- F. Introduction of theory that explains why it is so difficult to recognize the local cultural commons that people participate in. **Key idea: The following needs to be understood by classroom teachers and university professors who mediate (make explicit and clarify) the students' experiences in the two cultures—the students' local cultural commons and the culture of consumerism and environmental degradation that they are increasingly becoming dependent upon.** The theory (explanation of relationships) should always be related to examples that the participants can relate to on a personal level.
- \*\* taken-for-granted beliefs and practices.** The question that should have come up in earlier discussions is: why is it so difficult for students (and faculty for that matter) to be explicitly aware of the cultural patterns of behavior, thinking, and value judgments that are part of their everyday life? The point that needs to be made, and supported with many examples, is that most of our cultural knowledge, practices, values, etc., are learned at a pre-conscious level of awareness. Others who share the same taken-for-granted patterns are part of an ecology of collective reinforcement. **Key idea: One of the reasons that taken-for-granted cultural patterns are not easily recognized, aside from the way they are reinforced by others, is that our culture places special emphasis on thinking that knowledge, values and behaviors are rationally based, and thus are explicit.**

There is a double bind that classroom teachers and professors face when they take-for-granted the patterns that they should be helping students to become

explicitly aware of. Examples include reinforcing gender and racial stereotypes in the past that should have been made explicit, the equating of change with progress, thinking of organisms as having the same properties as machines, and so forth. **Key idea: Nearly every aspect of the cultural commons is taken-for-granted, which is why they go largely unrecognized.** When aspects of the cultural commons are taken-for-granted, they can be enclosed (integrated into the market system or lost to memory) without questions being raised and without resistance—especially when the market liberal ideology that represents progress as the expansion of markets is taken-for-granted. In order for workshop participants to get an idea of how much of their culture is taken-for-granted they should examine textbooks as well as other curriculum materials, such as educational software and films.

**\*\* how language reproduces past ways of thinking, marginalizes, and empowers. Key idea: If the different aspects of the cultural commons are not named it is more likely that they will be experienced as part of the students' taken-for-granted world.** Have the participants test this idea by naming the different patterns of meta-communication (e.g., the use of body language to communicate about relationships), and check with them about whether they become more aware of these patterns after they have been named. A second example would be to ask them who they identify as conservatives: environmentalists or corporations? Does the use of these political labels, specially the use of “conservative” generally ignore what they want to conserve? **Key idea: The inability to name aspects of the cultural commons that are otherwise taken-for-granted, or have been totally marginalized, reduces the students' communicative competence and thus their ability to protect the cultural commons from being enclosed by market and ideological forces.** Examples that can be used to make this point include the inability to recognize when habeas corpus, which was part of our cultural commons, was lost as a result of recent political decisions, or the number of people who supported the loss of privacy (thus ignoring a long-held tradition of our cultural commons) in order to be protected from the threat of terrorism that has been increased by governmental policies. Other examples include how consumerism replaces the development of personal skills and mutually supportive relationships. If the students cannot name the personal qualities associated with craft knowledge and performance they will be less likely to see what is lost when they become dependent upon the money economy, and upon what is produced in other countries. Another example is that if students have never learned about the history of social justice movements, such as what the labor movement struggled to achieve, students will be more likely to accept the working conditions dictated by their employer. Decisions about what should be included in the curriculum relating to various aspects of the cultural commons need to take account of aspects of the cultural commons that are under pressure by market and ideological forces. The key point here is that enabling students to become less dependent upon consumerism and on the form of society where basic human rights are being taken away by government, reduces the human impact on natural systems—and may contribute to slowing global warming.

**\*\* understanding how the languaging process reproduces many of the thought patterns, including misconceptions, from the past.** The metaphorical nature of language needs to be thoroughly understood if classroom teachers and professors are going to help students recognize how language is reproducing the patterns of thinking that were and still are the basis of promoting economic globalization. This is the most important double bind that educators at all levels face—and are generally unaware of because they have been socialized to think of language as a conduit in a sender/receiver process of communication. Learning the language and thus the thought patterns and values held by members of the language community is the most basic example of learning at a taken-for-granted level of awareness. **Key idea: Patterns of thinking are influenced by the root metaphors (interpretative frameworks) that were constituted in the culture’s distant past.** These root metaphors, such as patriarchy, anthropocentrism, mechanism, individualism, economism, progress, and now evolution, had different origins ranging from the culture’s mythopoetic narratives to powerful evocative experiences such as the invention of the mechanical clock. Root metaphors are culturally specific, and have over hundreds, even thousands of years, provided the taken-for-granted conceptual/moral schema for understanding new phenomena, and for reproducing today the patterns of thinking taken-for-granted in the past. Most of these root metaphors were constituted before there was an understanding of environmental limits, and how modern market forces, including the market-liberal ideology cause more people to become dependent upon consumerism. After presenting the example of how the root metaphor was constituted by Isaac Newton and Johannes Kepler, and relied upon by political theorists, scientists, and educators over the centuries, the participants should then be asked to identify the cultural influence of several other root metaphors such as individualism and progress. Have them identify how at different periods in recent history each root metaphor has been used as the taken-for-granted interpretative and moral framework for understanding a wide range of cultural practices. Among the insights that should emerge include: why some root metaphors tend not to be challenged and reconstituted by succeeding generations, and why others such as patriarchy and progress are challenged. This exercise will bring out the importance of the teachers/professors mediating role of clarifying how language reproduces the misconceptions of the past as well as how some examples of language that have been lost now need to be recovered,

---

Appendix B Overhead that presents how the mechanistic root metaphor has influenced thinking in a variety of fields over hundreds of years.

---

**\*\* understanding why the root metaphors underlying modern consciousness make it so difficult to be aware of the local cultural commons that are part of everyday experience.** Language illuminates and hides, and words often encode and thus carry forward the misunderstandings and prejudices of past generations. What needs to be brought out in the group discussion is how the root metaphors of *individualism, progress, mechanism, evolution, economism*, (and a conduit view of language—which is not a root metaphor), influence what

people are aware of—even when the root metaphor leads to ignoring the complexity of interactions and interdependencies. What people tend not to be aware of, given the way that root metaphors influence what aspects of experience will be recognized, also needs to be discussed. Two examples that can be used to clarify how language, particularly its formulaic use, frames awareness in ways that do not challenge the taken-for-granted root metaphors are: how the taken-for-granted status of the root metaphor of progress marginalizes awareness of traditions (including the traditions that progress is built upon); and how the root metaphor of individualism marginalizes awareness of how individuals are always in a complex set of relationships—with others, the environment, and with the languaging systems that we know as culture. **Key idea: The layered nature of metaphorical thinking that provided the cognitive and moral schemata that gave rise to the industrial revolution is still being reinforced in public schools and universities—and these schemata are major impediments to recognizing the cultural commons that are part of everyday experience.** At this point there should be a discussion of what classroom teachers and professors should help students understand about how language reproduces the patterns of thinking and moral values constituted in the distant past. There should also be a discussion of how different curriculum materials can be used to help students recognize how language frames how they think; as well as a discussion of the language that needs to be reclaimed in order to understand the nature and ecological importance of the cultural commons. As an example, can students take seriously the importance of the cultural commons, and the intergenerational knowledge that is at the core of the commons, if the word tradition continues to be understood as an impediment to progress and to the self-realization of individuals? **Key idea: The language of modernity, progress, and the market can be used to point out that not all aspects of the cultural commons contribute to social justice, ecological sustainability, and local democracy**

---

Appendix C Chapter 3, “Toward a Culturally Grounded Theory of Learning”  
from *The False Promises of Constructivist Theories of Learning*, 2005

---

- G. Summary of Important Features of the cultural commons.** The cultural commons include the following characteristics:
- a. They exist in every community—rural, urban, suburban, and in every culture.
  - b. They represent the daily practices that are largely (but not entirely) carried on outside of the money economy.
  - c. They are based on intergenerational knowledge, skills, and values that are largely mutually supportive, contribute to greater self-sufficiency of individuals and communities—and thus have a smaller ecological impact.
  - d. The cultural commons include the whole range of what might be called cultural traditions that range from a cultural sense of design, music, food, healing practices, narratives, moral norms governing human and

human/nature relationships, and ways of understanding the nature of wisdom and socially destructive behaviors.

- e. Not all aspects of the cultural commons, in our culture as well as others, should be viewed as morally just and ecologically sound. Racism, gender bias, stigmatizing of social groups may be reinforced by the language and institutional practices that are part of the cultural commons.
- f. The cultural commons are difficult for individuals to be aware of, especially in a culture that emphasizes change, individualism, economism, and is driven by a messianic market-liberal ideology.
- g. Public schools and universities, while beginning to incorporate environmental issues into the courses of different disciplines, continue to ignore the importance of helping students recognize how participating in the local cultural commons reduces their dependency upon a money economy, and reduces their impact on the natural systems already being rapidly degraded.

**Theme #3 The Many Faces of Enclosure** ( or how to destroy the cultural commons in the name of progress)

---

Appendix D Show the video by Helena Norberg-Hodge, [Ancient Futures: Learning from Ladakh](#)

---

- A. A basic definition of enclosure. Enclosure has been practiced from the beginning of human history whenever a powerful group or individual was able to claim exclusive access and use of what previously was shared in common by the rest of the community. Enclosure, to most people with a knowledge of English history, refers to abolishing the peasant's communal rights to the use of the local pasture and woodlots, which eventually led to their being forced off the land entirely. This resulted in them becoming landless wage earners in the newly emerging industrial system. These key characteristics, even in modern forms of enclosure still hold. Namely, the aspects of the cultural and environmental commons that are shared among members of the community on a non-monetized basis are enclosed when what was freely available to all members of the community becomes privately owned, is transformed into a commodity, and where use and access requires participating in a money economy.
- B. Brief history of enclosure. The communal right to participate in the cultural commons varied from culture to culture—as status systems emerged, and as prejudices and economic exploitation of the weak took different forms of cultural expression. The concept of the commons was given legal status in the Roman Institutes of Justinian. The law established the distinction between what was privately owned (res privatae), what was owned and thus the responsibility of the state (res publicae), and what represented the natural world common to all (res communes). In 1215, the English Magna Carta re-affirmed the Roman understanding of res-communes—but went further by establishing an important tradition of the cultural commons. This was the tradition of habeas corpus that we still rely upon today, but is now under

threat (enclosure) by government. The important point is that this and many other aspects of the cultural commons that have been part of everyday life in different cultures from the beginning of human history was not referred to as the cultural commons. This phrase has a more recent origin.

- C. New forms of enclosure that have a similar impact on the self-sufficiency and local democracy of communities. Enclosure may result from the introduction of new technologies that make craft skills and knowledge obsolete, prejudice toward intergenerational knowledge that leads to ignoring traditions that are empowering, loss or failure to develop the vocabulary for naming different aspects of the cultural commons, an emphasis in education on progress, patenting of ideas and other forms of human expression such as works of art, private ownership, market liberal ideology that emphasizes new technologies and markets—thus undermining traditions of intergenerational knowledge, promoting ideas and values that emphasize individualism and progress, reliance on technologies such as computers that marginalize face-to-face communication and the spoken word, government policies that promote support for eliminating habeas corpus and a check and balance system of government, and the capture of the attention of youth by the media and the allure of new technologies.

**Key idea: The enclosure of the various aspects of the cultural commons creates greater dependency upon the market system that is overshooting the sustaining capacity of nature systems. It undermines community patterns of mutual support and local democracy.**

- D. Some forms of enclosure are necessary to achieve greater social and ecojustice. Cultural patterns of discrimination and economic exploitation, that are encoded in institutional practices and in the narratives of the culture may be enclosed by actions of the federal government that force changes that bring local traditions in line with civil rights recognized by the larger society. Exposure by the press, social critics, and now blogs may lead to the enclosure (that is the local community is no longer free to engage in the practices) of these traditions. The enclosure of the institutional, legal, and narrative/linguistic traditions that perpetuate gender discrimination is an example of the positive uses of enclosure. **Key idea: Enclosure may be deepening the ecological crises as well as creating greater poverty and a sense of hopeless dependency on institutions that are under the influence of the market liberal “survival of the fittest” ideology.**

- E. How to make the local cultural commons and the various forms of enclosure part of the same process of learning. **Key idea: Just as north only makes sense when there is an understanding of the south, experience and the conceptual understanding of the cultural commons always has as its primary reference point the forces of enclosure.** The examples of how to integrate an understanding of the tension between the cultural commons and the forces of enclosure, as shown in Appendix E, which is from chapter 4 of the online book, Transforming Environmental Education, demonstrates the essential elements of inquiry—whether it is in the early grades where students are learning to recognize the experiential differences between the

spoken word and print-based communication or at the graduate level where students are learning how an ideology contributes to undermining ecologically sustainable local traditions of self-sufficiency.

**Key idea: As most university courses reproduce the silences and prejudices toward the intergenerational knowledge, skills, and relationships that do not fit the current orthodoxy for advancing the high-status knowledge that the market system of production and consumption depends upon, it is important to develop the habit of describing the patterns of experience (that is naming them in a way that makes them explicit) that are part of the commons and how they differ from experiences that are part of the industrial consumer-dependent culture.** Classroom teachers and professors need to encourage students to develop their own ethnographies of lived experience in the cultural commons as well as those in culture of industrial production and consumption. The descriptive accounts should then be used as the basis for discussing how experience in the two cultures influences relationships, the development of skills, the different forms of dependency, and their respective impacts on natural systems. **Key Idea: The question that needs to be kept in the forefront of the discussion is: What are the practices and relationships that have a smaller ecological impact while at the same time contributing to a more socially just society.**

**Theme #4 The role of classroom teachers and professors as mediators between the cultural commons and the industrial/consumer culture.**

- A. The role of the teacher/professor as mediator between cultures. As so much of what is learned in public school and university classrooms is dependent upon the printed word on a computer screen, in a textbook, and the spoken word of the classroom teacher/professor who is “sharing” what she/he thinks is important (and what is largely dictated by the orthodoxies within the discipline), little attention is given to the cultural patterns that students re-enact as they move in daily life between the cultural commons and the modern industrial culture—with its workplaces, big-box stores, roads, and constant media messages of what needs to be purchased in order to be individually happy, healthy, and successful. The amount of advertising on buses, television, buildings, clothes, computers, and so forth, is an inescapable form of enclosure of the senses that might otherwise connect the individual to the natural, non-commercialized world. **Key Idea: The focus of the actual cultural patterns that are experienced as students move between these two cultures will involve a level of complexity and questioning that requires classroom teachers and professors to adopt the role of mediator between the two cultures.** Mediating is different from imposing the answers on the students, and giving them a limited vocabulary where only the abstractions are sanctioned as more real than the on-the-ground experiences of students. As pointed out earlier there are aspects of the local cultural commons that may be environmentally destructive, such as dumping garbage on land that is seen as not having economic value—and that may be the source of social injustices, such as gender and racial discrimination. But there are many aspects of the

cultural commons, even in these environmentally destructive communities, that should be made explicit and strengthened, such as supporting neighbors in times of need. The same mix of constructive and destructive traditions in the industrial consumer oriented culture also exist. **Key Idea: The role of the mediator is to help students recognize the cultural patterns in both cultures (which often are not clearly separated), to name them, and then to identify the sustainable and unsustainable characteristics of each.**

Again, the main criteria should be what contributes to an ecologically sustainable future, and a morally coherent community that does not diminish the prospects of future generations. This means that blanket indictments of the industrial consumer culture represent a form of indoctrination, just as romanticizing the cultural commons is also a form of indoctrination that does not add to the students' communicative competence that is necessary for understanding what needs to be renewed and what needs to be changed.

B. What every teaching/learning situation requires: The ability to name aspects of both the cultural commons and the industrial/consumer culture that would otherwise be part of taken-for-granted experience is an essential requirement for the exercise of communicative competence and democratic participation in deciding what needs to be intergenerationally conserved and what needs to be changed. As stated before, if the person cannot name it, she/he cannot conserve it or change it. This was demonstrated by feminists who first had to name, and thus make explicit, the different ways they were marginalized and silenced. Over time, their oppressors began to recognize how their own taken-for-granted cultural patterns were complicit. As the rate of environmental change is occurring so rapidly, we do not have hundreds or even decades to sort out what needs to be intergenerationally conserved and what needs to be changed. Thus, there is a need to make explicit (that is, to name) more aspects of daily life that are ecologically sustainable, as well as what undermines both community and the environment, as the students move between the two cultures. And there is a need to avoid what can only be called ideological closed-mindedness and categorical judgments where thinking in terms of labels is substituted for a more culturally and ecologically grounded approach to understanding—and to political action. Whenever possible, the process of cultural mediation should involve the following elements:

- a. Giving words to what is being experienced in some activity that is part of the cultural commons—and giving words to the experience of a similar activity within the industrial/consumer culture. That is, encouraging students to make explicit what they would otherwise ignore because of its taken-for-granted status—and about which no one has encouraged them to articulate their feelings, thoughts, insights, and questions. This is part of the process of verbal mapping of the territory of taken-for-granted beliefs and daily practices, and it can be supplemented by a more deliberate mapping of the visual aspects of the cultural commons and the industrial culture of production and consumption. This visual mapping can be done at different levels in the educational process, and focus on different cultural themes and



practices. For example, mapping can include how the physical layout of the community influences how people interact with each other, and how people may be separated from important commons strengthening activities. Perhaps the easiest way to map the extent of skills, practices, and patterns of intergenerational knowledge that are part of the cultural commons of the community is to have students attend the local country fair where a variety of non-industrial produced items will be on display, to the local court house where the legal traditions are still carried on, and to the various groups in the community engaged in the various creative arts. The range of activities and skills that are expressions of the cultural commons should also become the focus for addressing the question of whether they have the same adverse impact on natural systems and on colonizing other cultures as what is produced by the industrial system.

In terms of the verbal mapping of experiences in the two cultures, examples could include the experiential differences between oral and print (computer) based communication, between food they prepare and industrial prepared food, between volunteering in a community project and working in a highly structured job, between developing their own creative talents and purchasing a commercially produced artistic creation, between the experience of being free of constant surveillance and being under constant surveillance, between the experience of being innocent until proven guilty and the possibility that because of a mistake in identity one might be imprisoned without legal recourse.

- b.** Acquiring the ability to articulate the issues, insights, feelings, questions about the differences between the two cultures, should be followed by considering which aspects of the two cultures contributes to social and ecojustice—and thus to a sustainable future. The industrial/consumer culture has made definite contributions to the quality of everyday life, here and abroad. It has also had a destructive impact on people's lives, communities, cultures, and the environment. Mediating requires identifying both the positive and negative aspects of the industrial/consumer culture as well as those of the local cultural commons. Mediating may also take the form of comparing the Western assumptions about individualism, freedom, progress, and mechanism, (which are part of the taken-for-granted experience of most middle class American students) with the cultural assumptions that are the basis of everyday life in non-Western cultures. Which assumptions strengthen community, contribute to a more ecologically sustainable future, enable the members of the community to participate more fully in mutually supportive and morally coherent aspects of the local cultural commons?
- c.** Whatever the mediating focus, it is important to encourage students to understand the historical forces that influence the practices and values they encounter as they move between the two cultures. For example, what cultural developments in the past are responsible for the Western

prejudice that gives higher status to print-based communication over that of oral communication? What are the origins of the idea that technology is neutral? Examining how interacting with different technologies affects the students' experience—e.g., relationships with others, what they are able to think about, what skills and forms of self-expression are allowed, etc.—will bring out that it is not neutral. How has the dominance of market values influenced how art is judged, and how students experience it in daily life? What influences contributed to today's practice of referring to market liberals as conservatives? More generally, as clarifying how language influences what the students experience and think, nearly every aspect of language—ranging from image words (iconic metaphors), to how the process of analogic thinking is framed by the prevailing root metaphors—has a history that needs to be understood. While this task will only be partially carried out under the best of circumstances, the minimum expectation is to have students acquire an understanding that words have a history, and that past misconceptions are often reproduced in current ways of thinking.

- d. The fourth aspect of cultural mediating should involve asking questions about how different aspects of the two cultures they move between impact the traditions of non-Western cultures. One of the problems with public schools and universities in America is that even though lip-service is given to multiculturalism, most of the disciplines—from the sciences, social sciences and humanities, to the professional schools—reinforce ethnocentric thinking. As mediating begins with encouraging students to give voice (names) to their experiences and questions as they move between the local cultural commons and the culture of the market place, it is important that the voices of other cultures, as well as the deep assumptions about reality these cultures are based upon, be taken into account. A strong case can be made that the imposition of the West's economic system, in addition to being driven by a desire for profits and power, is a result of ethnocentrism—which can also be seen in the imperialistic foreign policies that are always justified on the basis of winning these cultures over to our basic assumptions and values. The voices of other cultures may take the form of what their members have written about their traditions of mutual support, community/environmental relationships, religious traditions and human values, and so forth.

The global nature of the ecological crises—including global warming, changes in the chemistry of the world's oceans, shortage of potable water, among other rapidly degraded ecosystems—is inextricably bound to the degree humans become more dependent upon consumerism. The greater dependence upon consumerism translates into more toxic waste, more release of green house gases, more exploitation of aquifers and other sources of water, and more

destruction of habitats and loss of species. Dependence upon consumerism also leads to a loss of intergenerational knowledge of how to be more self-sufficient as a social unit—as an individual, family, community. As mentioned earlier, developing new energy efficient technologies will address only part of the problem. Unfortunately, gains made in this area will be overwhelmed as billions of people reject their own traditions of the cultural commons in order to pursue the false promises of the West’s consumer lifestyle. Mediating between the local cultural commons and the industrial/consumer culture that is spreading around the world needs to become the dominant pedagogy if we are to have any hope of a sustainable future

---

**Appendix E** Read pages 103-133 from The False Promises of Constructivist Theories of Learning (2005) and pages 82-92 from the online book, Critical Essays on the Enclosure of the Cultural Commons (2006)

---

### **Chapter 3 Why a Critical Pedagogy of Place is an Oxymoron**

There are many assumptions and values that science and environmental educators share with the proponents of critical pedagogy and place-based educators. The critical pedagogy theorist’s emphasis on social justice issues and the place-based educator’s stress on student’s becoming active participants in the interplay of their local communities and bioregions can easily be interpreted by science/environmental educators as natural allies in creating a more sustainable future. That all four groups have learned to take-for-granted many of the same cultural assumptions as well as the silences promoted in their university education is yet another reason that the agenda of a critical pedagogy of place appears so appropriate for supplementing the pedagogy and curriculum in environmental and science education classes. Among the key assumptions they share in common include thinking of change as an inherently progressive force (what the critical pedagogy theorists refer to as “transformations” and “transformative learning”), a deep seated ethnocentrism that is now masked by abstract references to valuing cultural differences, a view of language as a conduit—which marginalizes an awareness that words have a history and that their meaning needs to be continually updated through what the anthropologist, Clifford Geertz, referred to as “thick description” (1973), and that critical thinking always leads to overcoming oppression and environmentally destructive practices.

The other key assumptions reinforced in a university education take the form of prejudices that can be traced back to the ideas of Plato that were, in turn, reinforced by Enlightenment thinkers and most contemporary Western philosophers. These prejudices relate to the way “traditions” are now represented in most university classes—and especially in science-oriented classes. Another prejudice is that indigenous cultures are essentially backward and thus must be modernized by adopting the Western model of development—including modern science. One of the major silences in the university education of critical pedagogy theorists, place-based educators, and science-oriented educators is about the nature, importance, and diversity of the world’s cultural commons

for living a less consumer, more community-oriented lifestyle. To make the point more directly, science and environmental educators share many of the same assumptions that are taken-for-granted by the proponents of a critical pedagogy of place and thus do not recognize that combining “critical pedagogy” with “place” is an oxymoron. According to the dictionary, an oxymoron is “a rhetorical figure in which incongruous or contradictory terms are combined”. When both groups—the proponents of critical pedagogy of place and the science/environmental educators—find in each other’s approach to educational reform the language that appears to represent common interests, they may think that it is unnecessary to question whether the conceptual baggage (including the prejudices and silences) of both groups leads to basic contradictions—or what I would prefer to call conceptual double binds.

Part of the conceptual baggage that critical pedagogy theorists never mention is that Paulo Freire was a deeply Social Darwinian thinker, which can be seen if the reader goes to his description of the three stages of human (cultural) development in Education for Critical consciousness (1974a English language edition). There he describes the indigenous cultures living in the interior of Brazil as “men of semi-intransitivity of consciousness who cannot apprehend problems situated outside of their sphere of biological necessity.” His categories for other cultures that have evolved to a higher stage of development include “transitivity of consciousness”, “naïve transitivity”, and finally—“critically transitivity of consciousness” which he identifies as the most evolved consciousness of critical pedagogy theorists (pp. 17-19). John Dewey, the other less quoted source of thinking that environmental/science educators are more likely to have studied in their teacher education courses, is also a Social Darwinian thinker. His stages of cultural evolution can be seen in his many references to “savages”, people locked in a “spectator” approach to knowledge, and the more evolved thinkers who rely upon the experimental mode of inquiry for continually reconstructing experience. Both Freire and Dewey assumed that change is inherently progressive in nature, and both ignored the environmental damage of their times. Dewey, for example, refers to traditions (habits) “as routine ways of acting, or degenerate in ways of action to which we are enslaved...” (1916, p. 5). Freire’s most famous injunction for overcoming oppression can be found in Pedagogy of the Oppressed where he urges each generation to rename the world of the previous generation (1974b, p. 76). And in The Politics of Education, he states that “history makes us while we make it. Again, my suggestion is that we attempt to emerge from this alienating routine that repeats itself” (1985, p.199). Their misunderstanding of the nature and complexity of traditions is reproduced in the thinking of the advocates of a critical pedagogy of place, and is one of the reasons the latter group are unable to recognize the ecological and community strengthening characteristics of many of the world’s cultural commons.

A strong case can be made that even though the current generation of critical pedagogy theorists, such as Henry Giroux and Peter McLaren, now suggest that the multicultural nature of the world must be taken into account, and that we must address the economic basis of the ecological crisis, we can still see in their writings the main themes of both Freire and Dewey—which is the need to transform the world by relying upon an abstract Western epistemology that carries forward a number of misconceptions and prejudices that can be traced back to Plato’s Republic. Their emphasis on the efficacy of abstract theory in leading to a better world reproduces Plato’s assumption that

rational thought, which only an elite can effectively engage in, is a more reliable source of knowledge than narratives, embodied experiences, and the achievements of other cultures (Bowers, 2007a). For McLaren, the epistemological framework that should serve as a universal guide for addressing the ecological crises is the Marxist analysis that he is now attempting to “green” (2005). The silences and prejudices found in the theories of Dewey and Freire—particularly their indifference to the importance of the cultural commons as sources of resistance to the globalization of market forces as well as their prejudice toward other cultural ways of knowing-- also continue to be reproduced in the thinking of Giroux and McLaren—and to a lesser extent in the thinking of David Gruenewald. The problem for science/environmental educators is that these are the same silences and prejudices that were part of their own university education. These shared silences and prejudices, along with the shared cultural assumptions, are the most likely reasons that science/environmental educators do not recognize that a critical pedagogy of place is an oxymoron.

If one reads the writings of Giroux and, more importantly, McLaren, one finds recommendations for educational reforms that are based on a clear understanding of how capitalism is contributing to the development of a world monoculture, and to destroying the sustaining capacity of natural systems. McLaren gets this part correct. Whether the culturally diverse educators of the world will adopt his “green revolutionary critical pedagogy” that is to lead to an ecologically sustainable socialist future is more problematic. The important point is that neither Giroux’s vision of the teacher as a “transformative intellectual” ,McLaren’s revolutionary Marxist-oriented critical pedagogy, nor Joel Kovel’s eco-socialist pedagogy (2002) never address the specific curriculum reforms that should be undertaken. Their writings contain sweeping generalizations about social justice, the need for overturning oppressive practices—including capitalism. But they fail to explain how to introduce these reforms in the world’s diversity of cultures that range from the Euro-centric to the Muslim, Hindu, and the thousands of indigenous culture that make up the majority of the world’s population. As many of these non-Western cultures are well represented in urban areas across America, Canada, Great Britain, as well as other Western countries, there is a need for these critical pedagogy and eco-socialist theorists to explain how these cultural groups are to be educated to abandon their non-Western forms of consciousness, and to adopt the supposedly emancipated consciousness of Freire, Giroux, and McLaren.

If we were to do an empirical study of whom science/environmental educators rely upon most for their understanding of how to adapt a critical pedagogy of place to their approach to teaching and curriculum, I suspect that the person they would cite as the most influential would be David Gruenewald. The essay they are likely to cite as providing the best understanding of a critical pedagogy of place would be a “The Best of Both Worlds: A Critical Pedagogy of Place” (2003). If the reader lacks a knowledge of the historical roots of double bind thinking encoded in the languaging processes that are largely taken-for-granted, including how the silences and prejudices that have characterized Western philosophy since the time of Plato are still being perpetuated in universities, they are likely to think that Gruenewald has achieved a synthesis that avoids the problem of critical pedagogy of place being an oxymoron.

A key word that has been missing in the writings of Freire, and his many followers around the world (including McLaren’s reductionist and thus non-culturally

grounded and non-embodied use of the word) is “conservatism”. Gruenewald attempts to soften the emphasis of critical pedagogy on continual transformation, which is the goal of Freire’s critical pedagogy, by stating that the “question of what needs to be conserved takes on a special significance to a pedagogy of place” (p. 10). His acknowledgement that not everything needs to be transformed and decolonized was a result of an hour and a half telephone conversation with me, which he acknowledges the “Notes” section of the paper. Had he not had this conversation, his effort to explain the need for place-based educators to balance “decolonization” with helping local communities to learn how to “reinhabit” their place would have left the reader with the idea that both critical pedagogy and place-based education have essentially the same reform agenda. His reference to the need to be aware of what needs to be conserved puts him outside the mainstream of critical pedagogy thinking. Unfortunately, Gruenewald does not acknowledge that conserving involves, among other things, an awareness of the ecological importance of the many forms of intergenerational knowledge, skills, and patterns of interdependence and support that can also be understood as traditions. As pointed out above, a constant theme in writings of Freire, Giroux, McLaren, and Peter Roberts is that traditions need to be the main focus of the universal project of decolonization and emancipation. Gruenewald’s reference to conserving thus represents a radical departure from the emancipatory agenda of critical pedagogy theorists, but he fails to recognize that many of his readers will impose their stereotypical and reductionist understanding on his use of the word.

While Gruenewald makes a verbal genuflection in the direction of making awareness of what needs to be conserved part of his understanding of a pedagogy of place, he never goes on to identify what needs to be conserved. That is, like the other critical pedagogy theorists, there is no specificity to the recommendation—and this silence has to do with their collective lack of a deep understanding of cultures. To put it another way, Gruenewald shares with the other critical pedagogy theorists a lack of awareness of how a “thick description” of the local intergenerational knowledge should be a core creature of place-based education. The result is that the reference to knowing what needs to be conserved does not eliminate the problem of a reform agenda that is based on oxymoron thinking.

A careful reading of Gruenewald’s essay reveals that the agenda of critical pedagogy, which he refers to as “decolonization”, is his primary concern—and that “reinhabitation” turns out to be a context-free metaphor that has “God-word” standing that is beyond questioning. Unfortunately, he adopts from others an explanation of “reinhabitation” that justifies the transformative mission of critical pedagogy. He quotes the definition given by Berg and Dasmann, that reinhabitation means “learning to live-in-place in an area that has been disrupted and injured through past exploitation”. He also quotes David Orr’s explanation that “the study of place...has significance in reeducating people in the art of living well where they are” (Gruenewald, p. 9). What is important to note is that both quotations fail to acknowledge that there are aspects of the cultural commons that do not require “re-education” and learning to live in non-environmentally destructive ways. Gruenewald’s reliance on the word “reinhabitation” further strengthens the likelihood that science/environmental educators continue to ignore the importance of the cultural commons that have a smaller ecological impact. Unfortunately, educators are ill-prepared to re-educate the people who possess the economic and political advantages

that have allowed them to exploit the environment—though recent experience has demonstrated that students can participate with other environmental activists in forcing corporations and other environmental malefactors to modify their behavior.

Learning to participate in these collective environmental restoration efforts should be a key part of place-based education. However, what is not recognized in Gruenewald's ideologically driven effort to make place-based education dependent upon the critical pedagogy of decolonization ( a word that has its roots in a Marxist analysis) is that most environmental activists rely upon a more general understanding of critical reflection that can be traced back to the ideas of Socrates. Indeed, critical reflection, over the centuries, as not always been used to achieve social justice. It has been relied upon to solve a wide range of problems, such as how to identify and punish people who were drifting from the orthodoxies of the Catholic Church, how to introduce social reforms that would contribute to greater social justice in society, how to market products that the public was unaware of needing, and how to ensure that the adoption of a new technology would not undermine the intergenerational knowledge essential to a morally coherent and mutually supportive culture. A specific example of the exercise of critical reflection that was not informed by the change-oriented interpretation that the critical pedagogy writers take-for-granted (except for the Bowers' influenced qualification that Gruenewald makes) is how a First Nation culture in Canada relied upon critical reflection in sorting out the cultural issues involved in adopting computers in their approaches to education. For them, critical reflection involved examining what needed to be changed and what needed to be conserved—and it was a process that combined critical reflection and democratic decision making that took two years to work through.

Gruenewald's efforts to incorporate a concern with balancing a decolonizing educational agenda with an awareness that conserving must also be taken into account in placed-based education brings into focus another aspect of the conceptual baggage that is part of critical pedagogy thinking that few educators think critically about. Gruenewald, like Freire, McLaren, and Moacir Gadotti (Director of the Paulo Freire Institute in Brazil) reproduce a tradition that can be traced back to one of Plato's contributions that Western philosophers have been happy to sustain: namely, the idea that there is such a thing as "pure thinking". That is, the idea that thinking, when rationally based, is free of the influence of the cultural epistemology encoded in the metaphorical language of the cultural group—and upon which the "thinker" relies and generally takes for granted.

The current manifestation of this phenomenon was best described by Alvin Gouldner when he wrote that " the culture of critical discourse is characterized by speech that is *relatively* more *situation-free*, more context or field 'independent'. This speech culture thus values expressively legislated meanings and devalues tacit, context-limited meanings. It's ideal is 'one word, one meaning' for everyone and forever" (1979, p. 28). This proclivity of relying upon abstractions that have been melded together into a theory can be seen not only in Gruenewald's reliance on the words "decolonization" and "reinhabitation" but also in Gadotti's claim that environmental educators should foster a "planetary consciousness" and that this form of consciousness can only be created as the environmental educator disrupts the process of cultural transmission by encouraging students to discover this consciousness for themselves. This is to be achieved, according to Gadotti, by encouraging students to undertake "the grand journal of each individual into his interior universe and the universe that surrounds him" (2000, p. 9). While Freire

would not go along with this subjective approach to emancipation from the processes of cultural transmission, Gadotti's proposal is not fundamentally different from Freire's argument that each generation can only achieve the fullest expression of their humanity as they rename the world of the previous generation-- a proposal that ignores the differences in cultural ways of knowing that often were and still are the basis of living within the limits and possibilities of their bioregion.

McLaren also reproduces the Platonic pattern of representing abstract thinking and theory as more legitimate than context-dependent forms of knowledge--which I will explain more fully in terms of Geertz's idea of "thick description. For example, McLaren reduces the discussion of what needs to be conserved in America's political and environmentally degraded circumstances into a word game where one abstract definition is played off against another abstraction—and in the process reproduces another part of the Platonic legacy that Western philosophers have perpetuated. Namely, the marginalization of other cultural ways of knowing, including the nature and ecological importance of their cultural commons. In his usual style of misrepresenting the ideas of people whom he disagrees with, McLaren (along with Donna Houston) writes that "we may have found some more common ground with Bowers if not for his insistence on boiling everything down to a linguistic struggle over whether the word transform or the word conservative is the more appropriate political term" (2005), p. 204). By ignoring the extended discussion in my earlier book, Mindful Conservatism (2001) that was based on a thick description of the biological, linguistic, psychological processes that are unavoidably conserving, and that presented the conservative ideas of Edmund Burke, Michael Oakshott, and such environmental conservative writers as Wendell Berry, Vandana Shiva, and Masanobu Fukuoka, he represents both the words conserve and transform as having a universal meaning and thus free of cultural contexts. If one examines the key words in Gruenewald's article, we find the same proclivity of assuming that words have a universal meaning.

Let me be more specific here. The context-free use of language that characterizes both how critical pedagogy and place-based education are supposedly complementary processes is key to understanding why, when fused together, a critical pedagogy of place is an oxymoron. The quotations that Gruenewald borrows from Berg, Dasmann, and Orr represents only a partial understanding of how people inhabit place. And their representation of how people need to be "reeducated in the art of living well" represents an example of context-free thinking. If Berg, Dasmann, Orr, and, for that matter, Gruenewald, had engaged in a thick description of what all is constituted in inhabiting place they would have found that the nature of place-based education has a more complex agenda than that of decolonization and reinhabitation.

According to the anthropologist, Clifford Geertz, thick description is what enables one to know the difference between (to use his example) an involuntary wink of eye and a wink that is intended to send a message. That is, thick description involves examining the history of prior relationships, issues of gender and class, personal biography, and all the other background cultural patterns that may have influenced the nature of the message that was being sent. Another example is when feminists challenged the prejudices inherent in genderized language by doing a thick description of their history of achievements, patterns of discrimination, various forms of exploitation—and even the mythopoetic narratives that represented them as inferior to



men. Thick description involves challenging the abstractions that carry forward past misconceptions, prejudices, silences, and stereotypes that are encoded in metaphors such as decolonization, critical inquiry, emancipation, individualism, tradition, woman, planetary citizen, American, Canadian, British, Muslim, and so forth.

Why a critical pedagogy of place is an oxymoron can be seen if a thick description of how different cultural groups inhabit place is undertaken. This would require a thick description of the cultural traditions and practices of the nearly 6000 linguistic groups still surviving (with some on the verge of extinction), as well as all the ethnic groups that mix and mingle with other groups in urban areas. Recognizing this huge task, which can be undertaken if the science/environmental educator focus on local people and local places, can lead to profoundly different pedagogical practices that go beyond the assumption that *all* people need to in learn how to re-inhabit on a sustainable basis the local bioregion. A thick description of the relationship between people and place may reveal the patterns of environmental abuse, as well as the ideology and technoscience developments that are major contributors to degrading the environment. But it may also lead to an awareness of many aspects of the local cultural commons that have been carried on for generations, and that represent alternatives to the consumer/industrial culture that is being globalized. The intergenerational knowledge that sustains many of the cultural commons that strengthen patterns of mutual support within communities and that have a smaller ecological impact represent patterns of habitation that do not need to be “decolonized”.

A different vocabulary than that of critical pedagogy theorists is required in describing (doing a thick description of) the many expressions of the local cultural commons that represent sites of resistance to the hyper-consumer dependent lifestyle required by the industrial system of production and the incessant pursuit of profits. A thick description of the cultural commons carried forward by different ethnic groups, such as their approach to the preparation and sharing of food or their traditions of mutual support, would bring out the complexity existing within the community’s mutual support systems as well as their historical continuities. Making explicit these traditions (some of which may perpetuate forms of discrimination) may also bring out the degree to which there is an awareness of how the cultural commons are being enclosed—that is, being incorporated into the market system of production and consumption. Women in Third World cultures who have had the traditional responsibility of identifying the seeds for the next year’s planting are aware of how the introduction of the Green Revolution, with its reliance on chemicals and excessive use of water, are clearly aware of how their traditional knowledge was the basis of a subsistence existence that is now being threatened by the double bind of becoming increasingly dependent upon a money economy when their income is so severely limited.

Other aspects of the traditions of the cultural commons, what can be referred to as the intergenerational knowledge, skills, and systems of mutual support, include the narratives, approaches to the creative arts, ceremonies, civil liberties and systems of reintegration into community, craft knowledge, and so forth. The cultural commons of some groups include racist, gender, and age-related forms of discrimination and exploitation—which should be reformed by recovering the social justice traditions of the culture rather than driven by a Western ideology. We need to remember that the Woodrow Wilson ideal of making the world safe for democracy, which corporations and

the World Trade Organization have reframed as making the world safe for achieving a global capitalist economy, is part of the West's messianic tradition that has its roots both in messianic Christianity, and in liberating ideologies that perpetuate the same disregard that Plato and other Western thinkers such as John Locke, Descartes, Adam Smith, John Dewey, Paulo Freire have shown toward the possibility that other cultures may have developed in ways that do not degrade the environments they depend upon.

Overcoming the oxymoron agenda of an critical pedagogy of place can be done if science/environmental educators understand their role as more complex than educating students to transform the local practices that are degrading the natural systems that future generations will depend upon. In suggesting how thick description should be an integral part of the educational process, it is important to identify another problem that is rooted in most approaches to educating science and environmental educators. That is, while there is a difference between the scientific method and the scientists who think and communicate in the language of their cultural group, the professors who control the courses that science and environmental educators take as part of their professional studies too often do not themselves possess a deep knowledge of culture and thus do not require this of their students. The double bind here is that if science and environmental educators adopt a pedagogy based on a critical pedagogy of place, they will be dealing with cultural issues for which they have little or no understanding.

And when becoming an agent of cultural decolonization and re-inhabitation they may be moving down the slippery slope of scientism that we now find being promoted by highly acclaimed scientists. I am referring here to E. O. Wilson who claims in Consilience: The Unity of Knowledge (1998) that before the rise of Western science people were locked in a cognitive prison, that the brain is a machine, that religions are adaptive behaviors and should now be replaced by the theory of evolution, and that scientists are best prepared to determine which cultural practices and values should be allowed to exist. Francis Crick, in The Astonishing Hypothesis (1994) promises that scientists will soon be able to explain the nature of human consciousness—including why some people become outstanding musicians and mathematicians. And Lee Silver, in Remaking Eden (1997) claims that the next challenge facing scientists will be to create a class of "Gene Rich" humans who will over time occupy their own niche in the process of human evolution. The less known scientists responsible for intelligence tests and the eugenics movement also must be kept in mind when considering how scientists often reproduce the misconceptions of their culture. The example of the many scientists who introduced into the environment thousand of chemicals without knowing how they would interact on each other or on the reproductive systems of humans and other organisms—all in the name of progress—must also be kept in mind. The scientist's lack of a deep knowledge of cultures, including how the languaging systems of different cultures carry forward the misconceptions (and in many instances the wisdom) of the past should be a major concern of science/environmental educators who take on the role of that a critical pedagogy of place assigns them.

Given this warning, I would like to suggest an approach that addresses what is missing in the critical pedagogy approach to place-based education. As suggested earlier, the cultural and environmental commons began with the first humans walking the savannas in what is now called Africa. While environmental scientists and various conservation groups are attempting to conserve and restore what remains of the

environmental commons, there are cultural commons that also exist in every community—but again in highly attenuated conditions where what remains are under constant threat of being enclosed (being privatized by individuals and corporations, monetized, turned into a new consumer product or service).

The pedagogy that strengthens the local traditions of intergenerational knowledge, skills, and patterns of mutual support that enable members of the community to be less dependent upon consumerism, and thus to have a smaller ecological footprint, requires the teacher and professor to adopt the role of the mediator, and to engage students in thick descriptions of the differences between their experiences in various cultural commons activities and experiences in the industrial/consumer culture. The mediator, unlike the critical pedagogy-oriented teacher, does not set out to decolonize or emancipate students from the intergenerational knowledge and skills that the critical pedagogy theorist has relegated to the realm of silence or has prejudged as backward. Rather, it is to encourage students to identify and to give voice to their experiences in the various cultural commons in their community as well as the corresponding industrial/consumer activities. The mediator does not give the answers in advance and does not assume at the outset that the teaching moment is also a moment of transformation. Rather the purpose of the mediator is to engage students in the process of thick description that leads to acquiring the language necessary for exercising the communicative competence required in the democratic process of deciding what needs to be resisted, fundamentally changed, or conserved and intergenerationally renewed.

Thick description can begin in the early grades by having students discuss the differences they experience in oral and print-based thinking and communication. Encouraging students to engage in a thick description would lead to giving voice to the differences in relationships, patterns of moral reciprocity, feelings, patterns of thinking, what cannot be made explicit in both modes of communication, and so forth. In effect, it leads to making explicit what may otherwise be taken-for-granted and thus not recognized as either problematic or as a life and community-enhancing pattern. Later, thick description may focus on the differences between an assembly-line experience and a craft endeavor, between developing a talent that leads to participating with others in one of the creative arts and becoming a consumer of artists whose works are part of the market system, between possessing the language necessary for identifying one's civil liberties and the experience of accepting the right of government and corporations to keep every aspect of daily life under constant surveillance, between growing a garden and being dependent upon foods flown in from the far reaches of the world, between acquiring the skills necessary for helping a neighbor and working at an unfulfilling job in order to hire someone else to make the repair, between work that is returned and work that is paid, between relying upon intergenerational knowledge of healing practices and relying upon industrialized medicine, between living more self-reliant and community centered lives and being the autonomous individual required by the market systems of production and consumption, and so forth. The differences between the cultural commons and the market dictated relationships exist in both rural and urban environments. A fuller account of how different aspects of the cultural commons and forms of enclosure can be introduced at different stages in the educational process can be found in the online book, [Transforming Environmental Education: Making the Cultural and Environmental Commons the Focus of Educational Reform](#), which can be accessed by going to

<[www.http://cabowers.net](http://cabowers.net)>. The online Handbook (Bowers, 2007b) that can be found at the same online address explains in greater detail the teacher's/professor's role as a mediator between the sub-culture of the local cultural commons and the subculture of the market/consumer dependent lifestyle.

The mediator, regardless of level of schooling (including home schooling), needs to encourage students to do a thick description of how different aspects of the cultural common impact natural systems—as well as a thick description of narratives and other aspects of the cultural commons that contribute to degrading natural systems and to oppressing, marginalizing, and exploiting other members of the community. The latter may take the form of doing a thick description of the higher values to which the community also subscribes (perhaps the social gospel or other sacred texts) and the community practices that contradict these higher values.

To reiterate the key reason that a critical pedagogy of place is an oxymoron is that the linguistic tradition of relying upon abstractions, including abstract theories that encode many of the same taken-for-granted assumptions that underlie both the idea of universal decolonization and the market liberals' efforts to universalize the West's consumer dependent lifestyle, fail to take account of the intergenerational traditions of habitation that still exist in communities. Places have a long and culturally varied history, while the language of a critical pedagogy of place has a specific history that carries forward the tradition of ignoring the diverse ways in which more ecologically centered cultures and community practices have contributed to long-term habitation of place.

One has only to recall the generalizations of Dewey, Freire, and Gadotti that reveal their respective one-true approaches to reconstructing experience, emancipation, and achieving a planetary consciousness to recognize that their prescriptions for change are based on a culturally uninformed theory that is intended to be universalized. Unless science/environmental educators are knowledgeable about how universal prescriptions too often become a cultural colonizing agenda they should be wary of ignoring the inherent contradiction in a theory that leads to understanding “decolonization” only in terms of Western cultural assumptions, and that represents “reinhabitation” as an excuse for educators to ignore the different expressions of the local cultural commons that students need to help revitalize. Even though Gruenewald makes an effort to balance the transformative agenda of critical pedagogy with an awareness of what needs to be conserved, he still falls short of clarifying the nature and importance of the local cultural commons—and the pedagogy that is required for helping students recognize the differences between commons and market based experiences. Unfortunately, the assumptions underlying critical pedagogy are now so widely taken-for-granted among educators in nearly all subject areas that the silence about the need to acquire a deep knowledge of culture, that of the teacher as well as the culture of others that are to be decolonized, is likely to be ignored by science/environmental educators who identify with a critical pedagogy of place.

## References

Bowers, C. A. 2001. Mindful Conservatism: Rethinking the Ideological and Educational Basis of a Sustainable Future. Lanham, Maryland: Rowman & Littlefield.

- \_\_\_\_\_. 2006. Transforming Environmental Education: Making the Cultural and Environmental Commons the Focus of Educational Reform. Eugene, Oregon. <www. <http://cabowers.net>>
- \_\_\_\_\_. 2007a. "Philosophy, Language, and the Titanic Mind Set". Language and Ecology. Vol. 2, No. 2. pp. 1-15. [www.ecoling.net/journal.html](http://www.ecoling.net/journal.html)
- \_\_\_\_\_. 2007b. Handbook for Faculty on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses. Eugene, Oregon. <www. <http://cabowers.net>>
- Crick, Francis. 1994. The Astonishing Hypothesis: The Scientific Search for the Soul. New York: Charles Scribner's Sons.
- Dewey, John. 1916. Democracy and Education. New York: Macmillan.
- Freire, Paulo. 1974a. Education for Critical Consciousness. New York: The Seabury Press.
- \_\_\_\_\_. 1974b. Pedagogy of the Oppressed. New York: The Seabury Press.
- \_\_\_\_\_. 1985. The Politics of Education: Culture, Power, and Liberation. South Hadley, MA.: Bergin & Garvey.
- Gadotti, Moacir. 2000. "Pedagogy of the Earth and Culture of Sustainability." Sao Paulo, Brasil. Instituto Paulo Freire.
- Geertz, Clifford. 1973. Interpretation of Cultures. New York: Basic Books.
- Gouldner, Alvin W. 1979. The Future of Intellectuals and the Rise of a New Class. New York: Seabury Press.
- Gruenewald, David. May, 2003. "The Best of Both Worlds: A Critical Pedagogy of Place." Educational Researcher. Vol. 32, No. 4. pp. 3-12.
- Kovel, Joel. 2000. The Enemy of Nature: The End of Capitalism or the End of the World? London: Zed. Books.
- McLaren, Peter. 2005. Capitalists & Conquerors: A Critical Pedagogy Against Empire. Lanham, Maryland: Rowman & Littlefield.
- McLaren, Peter, and Houston, Donna. 2005. "The 'Nature' of Political Amnesia: A Response to C. A. (Chet) Bowers." Educational Studies. Vol. 37, No. 2. pp. 196-204.
- Roberts, Peter. 2000. Education, Literacy, and Humanization: Exploring the Work of Paulo Freire. Westport, CT.: Bergin & Garvey.
- Silver, Lee. 1997. Remaking Eden: How Genetic Engineering and Cloning Will Change the American Family. New York: Avon Press.

#### **Chapter 4 Understanding the Connections Between Double Bind Thinking and the Ecological Crises: Implications for Educational Reform**

. The 2007 conference of the American Educational Research Association was especially notable, but for the wrong reasons. It was attended by over 12000 educators from around the world, and it took place well after scientific journals, the public media, and Al Gore's film "An Inconvenient Truth" had contributed to a profound shift in the public's awareness that the world is facing an ecological tipping point that will alter life on this planet. In America, which lags behind the level of ecological awareness of many European countries, public opinion has recently shifted, with surveys indicating that 70 percent of the people now think that the ecological crises is a major concern that needs to be addressed. Reports on global warming, as well as on changes in the chemistry of the world's oceans, and the spread of extreme weather patterns, were headline news in the newspapers, on television, and on talk radio. Even evangelical Christian groups were announcing that the ecological crises was a sign that they were failing as stewards of God's creation.

However, for the professors of education who had assembled in Chicago, the old paradigm still prevailed. There were literally thousands of papers presented on various aspects of curriculum theory, accountability, constructivism, diversity issues, and so forth; with only fifteen papers addressing environmental education and eight papers that framed environmental education issues within the new ecological paradigm. That the West's cultural practices and ways of knowing are major contributors to global warming, and that the West's approach to education is complicit in fostering a consumer-dependent lifestyle that is overshooting the sustaining capacity of the Earth's natural systems, was only discussed in a couple of the papers (Hawken, Lovins, Lovins, 1999). The extent that over 12000 thousand participants are still under the hold of the paradigm that produced the industrial revolution, and now its digital phase of development, can be seen in the fact that less than a hundred participants were engaged in discussions of educational reforms based on the new paradigm that represents humans and the diversity of the world's cultural ways of knowing as embedded in and dependent upon the self-renewing capacities of the Earth's ecological systems.

It is quite obvious that the participants at the AERA conference had heard about the various forms of environmental degradation, as well as the plight of people who are being displaced by environments that can no longer support human life. Yet, their thinking continues to be based on the same cultural assumptions that have been taken-for-granted for hundreds, even thousands of years. The assumption of an anthropocentric

universe can be traced back to the Book of Genesis, and the assumptions about the progressive nature of change, individualism, and a culture-free rationality, go back hundreds of years.

The editors of this special issue are correct in urging that educational reforms should contribute to a profound paradigmatic change—one that leads to ways of thinking and acting that have a smaller ecological footprint. The question is: Which approach is most likely to succeed in bringing about the radical changes that are required to slow the rate of environmental degradation. Should educators return to the Social Darwinian thinking of John Dewey who claimed that experimental inquiry is the only valid approach to knowledge, to constructivist learning theorists who share many of the deep cultural assumptions that the industrial /consumer-dependent lifestyle is based upon, to the social justice liberals who want to ensure that educational reforms enable marginalized groups to participate equally within the capitalist economy that is overshooting what natural systems can sustain, to the scientists who are now claiming that cultural beliefs and practices are cultural “memes” that must meet the same test of Darwinian fitness as genes? I think not!

Instead of looking to the current proponents of educational reform, we should consider the strategies of the feminist movement that has achieved a modicum of success in changing people’s taken-for-granted assumptions, as well as many cultural practices based on centuries old assumptions. The feminist movement has had limited success in achieving greater equality in many areas of social life. Unfortunately, it has not yet led to the paradigmatic change that would enable humans to live less environmentally destructive lives. Nevertheless, the movement demonstrated an approach to change that is now being duplicated by various environmentally oriented groups—ranging from architects to organic farmers. That is, the feminists challenged the language of patriarchy and the institutional systems that this language sustained. In naming what was part of people’s tacit understandings, they developed a vocabulary that made explicit what previously was not part of the public discourse. This process of renaming what was previously taken-for-granted as the normal, progressive way of doing things also can be seen in how Rachel Carson changed the meaning associated with DDT from a chemical that gave humans more control over their environment to that of a life threatening agent. The introduction of other words into the vocabulary that had sustained for hundreds of years the West’s efforts to globalize the industrial system of production and consumption, and to view the exploitation of the natural systems as signs of progress, is also bringing about important changes that are slowly moving a small segment of society toward a shift in paradigms. Words and phrases such as “local”, “organic farming”, “global warming”, “acidification of the oceans”, “greening”, “precautionary principle”, “slow food”, and so forth, both serve to make explicit what is problematic about the language of the industrial-consumer-anthropocentric culture and to foster an awareness of less environmentally destructive cultural practices.

Scientists estimate that we may have from 10 to 50 years before we reach the tipping point where human action will be unable to slow the rate of global warming. When we compare this time frame with the length of time it took the feminists to bring about a change in consciousness and cultural practices among a small segment of the population, and the time it took various environmental groups to rediscover the community and environmentally enhancing alternatives to being compliant consumers,

the challenge of introducing fundamental changes in the still dominant cultural assumptions is exceedingly daunting. Economic globalization, which is driven by governments and corporations that equate the expansion of markets and profits with progress, is still the hegemonic force in the world today (Stiglitz, 2002). Nevertheless, the feminist, environmental, and social justice movements make clear what pathway needs to be followed if we are to bring about a different form of consciousness.

It is especially critical for educational reformers to recognize how the languaging processes they reinforce in the classroom continue to perpetuate the cultural practices that are overshooting what the environment can sustain (Stibbe, 2005; Grabowsky, 2007). The cultural assumptions encoded in the language reinforced in classrooms also undermine an awareness of the community-centered intergenerational traditions that enable people to live less consumer-dependent lives. It is ironic that while educators from early grades through graduate school rely primarily upon the spoken and written word, few are aware of how language reproduces the cultural assumptions that eco-justice activists are challenging (Bowers, 2001). It was the feminists who awakened teachers and professors to the ways they were reinforcing the language that sustained gender bias. While environmentally oriented scientists are increasingly relying upon an ecological interpretative framework, most teachers and professors continue to reinforce the language framed by the root metaphors of individualism, progress, anthropocentrism, mechanism, etc., that gave conceptual direction and moral legitimacy to the industrial/consumer oriented culture—and that continue to perpetuate the silences of how to live less consumer dependent and more community-centered lives.

### **Linguistic Basis of Double Bind Thinking**

To paraphrase Albert Einstein, we cannot successfully resolve a problem if we rely upon the same mind-set that created it. This observation, as well as the experiences of groups working to achieve greater social and eco-justice, highlights the problem Gregory Bateson referred to as double bind thinking (Bateson, 1972). Basically, double bind thinking involves relying upon the misconceptions of the past when addressing current problems. The double bind occurs when the solution magnifies the problem, such as pursuing greater economic growth when it destroys the natural systems. Another example of double bind thinking, where the assumptions from the past continue to frame current thinking, can be seen in the widespread effort to base educational reforms on the idea that students should construct their own knowledge. Constructing their own knowledge, in effect, will leave them ignorant of the accumulated and time-tested intergenerational knowledge and skills necessary for being more self-sufficient in preparing meals, growing gardens, participating in the creative arts, knowing the traditions of civil liberties and patterns of moral reciprocity, and so forth. This double bind, where the culturally specific assumption about the freedom of the individual is made the cornerstone of a supposedly non-repressive approach to education, results in individuals becoming more dependent upon the industrial system to supply what they lack the skills to do for themselves. What various constructivist learning theorists ignore is that the industrial culture requires the anomic individual who lacks the community's fund of knowledge of how to live in ways that are less dependent upon consumerism.

One of the reasons why classroom teachers and university professors are unaware of the double bind thinking they promote in their classrooms is that most assume that



language functions as a conduit in a sender/receiver process of communication (Reddy, 1979). This myth sustains other myths essential to the sub-culture of the educational establishment: namely, that there is such a thing as objective knowledge (as though it does not originate from an individual's culturally influenced observation and interpretation), and that the rational process is free of cultural influence (as though thinking is not based in part on metaphors that are dependent upon analogs constituted at an earlier time within the culture). The conduit view of language also contributes to another misconception, which is that words such as individualism, democracy, freedom, data, etc., have a universal meaning and thus are free of specific cultural contexts and tacit understandings (Gouldner, 1979, pp. 28-29). The major problem associated with the conduit view of language is that it hides the metaphorical nature of language—and how metaphors reproduce the schema of understanding (analog) that prevailed at an earlier time over competing analogs. Martin Heidegger put it this way: “when an assertion is made, some foreconception is always implied; but it remains for the most part inconspicuous, because language already hides in itself a developed way of conceiving (Heidegger, 1962, p. 199). School teachers and university professors tend to ignore that words, as metaphors, have a history-- thus making it unnecessary to ask whether the meaning associated with the word (the analog that is the source of the taken-for granted conceptual schema) is appropriate to the current cultural and environmental setting.

If classroom teachers and professors are to help students acquire the language necessary for understanding that their existence, as well as that of future generations, involves interdependent relationships, and not the Cartesian gaze of the supposedly autonomous individual, they will need to understand that the meaning of image words such as “tradition”, “progress”, individualism”, “community”, and so forth is influenced by the root metaphors that are largely taken for granted. The list of root metaphors that have influenced the development of high-status forms of thinking and cultural practices in the West include patriarchy, anthropocentrism, mechanism, individualism, progress, economism, and , now, evolution. Just as patriarchy is being challenged in some cultures, ecology is gaining ground as a root metaphor within certain segments of society—even though it has been the basic conceptual/moral framework in many indigenous cultures for thousands of years. Root metaphors, such as mechanism, provide the conceptual framework that is used to understand a wide range of phenomena—from thinking of the universe as a giant clockwork as Johannes Kepler put it in the seventeenth century, to thinking of the human body as a survival machine as Richard Dawkins claims in his book The Selfish Gene (1976), to how E. O. Wilson refers to the “brain as a machine” and thus only “ a problem in engineering” in Consilience (1998), to how a plant cell is described as having such industrial-like components as a “powerhouse”, “solar station”, “recycling center”, and “production centers”.

### **Recognizing the Role of Root Metaphors in Double Bind Thinking**

Image words (or iconic metaphors) such as “creativity”, “intelligence”, “community”, and “wild” take on different meanings depending which root metaphors are taken-for-granted within the culture. Before the root metaphor of progress became part of taken-for-granted patterns of thinking, creativity was understood as best exemplified in the aesthetic achievements of the early Greeks. It involved, in effect, going back to a classical period, rather than today's idea of creativity-- which is equated

with what is new and innovative (regardless of its aesthetic qualities). Similarly, when the worldview that sustained feudal cultures was taken-for-granted, the “individual” was understood as a subject. The root metaphor of an anthropocentric universe is clearly evident in the textbook explanation that “community” is where people work, play, and shop. An explanation based on the root metaphor of ecology would include, in addition to the humans, the plants, animals, and the other interactive elements that make up the ecosystem. That is, the definition of community would be inclusive of the local cultural and natural ecology.

The first step in making the transition to thinking within a new paradigm is for educators at all levels, from the earliest grades through graduate level classes, to be aware of the root metaphors that frame interpretations, that reproduce past misconceptions and prejudices, and are responsible for the silences that have put us in a collective situation where it may be too late to slow the rate of global warming and other forms of environmental degradation. This will be an exceptionally difficult task as the root metaphors that underlie the continued globalization of the industrial/consumer-dependent culture have also marginalized an awareness that most of our cultural knowledge is taken-for-granted—and becomes part of the individual’s natural attitude as she/he participates in the multiple languaging processes that sustain everyday relationships (Berger and Luckmann, 1967). That is, most classroom teachers and university professors emphasize the explicit and too often context-free forms of knowledge, and ignore that most of the student’s cultural knowledge is tacit, contextual, and taken-for-granted. The emphasis on the abstract thinking encoded in print, first in books, and now on the computer screen, contributes to this silence about the hold that taken-for-granted knowledge has on how people think. Face-to-face communication in the classroom is largely a matter of putting into the spoken word the abstract knowledge learned from the printed page. This is profoundly different from the more context-dependent forms of intergenerational communication that sustain the cultural commons as well as the moral norms governing the environmental commons.

### **The Cultural and Environmental Commons**

Before going into the pedagogical and curricular reforms that will avoid reproducing the paradigm that sustains the current dominance of the industrial/consumer-oriented culture, it is necessary to identify some of the characteristics of cultures that have achieved a more sustainable balance between the market and other aspects of community life. In the chapter titled “Market”, Gerald Bertoud, in critiquing from Third World perspective the West’s understanding of markets, observes:

We are all subject to the compelling idea that everything that can be made must be made, and then sold. Our universe appears unshakeably structured by the omnipotence of technoscientific truth and the laws of the market....What must be universalized through development is a cultural complex centered around the notion that human life, if it is to be fully lived, cannot be constrained by limits of any kind. To produce such a result in traditional societies, for whom the supposedly primordial principle of boundless expansion in the technological and economic domains is generally alien, presupposes overcoming symbolic and moral ‘obstacles’, that is, ridding these societies of various inhibiting ideas and

practices such as myths, ceremonies, rituals, mutual aid, networks of solidarity, and the like. (in Sacks, 1973, pp. 71-72).

What Berthoud is describing are the cultural and environmental commons that vary from culture to culture, and from bioregion to bioregion. While many readers will associate the commons with a public space and with the enclosure movement in England that followed the introduction of new crops, farm technologies, and the beginning of the Industrial Revolution, the cultural and environmental commons still exist around the world—including in rural and urban areas of the West.

The current misunderstanding about the existence of the cultural and environmental commons, even in their degraded condition, again reflects the problem of ignoring that words have a history, and thus that the analog that frames their meaning should not be derived from a profoundly different past, or associated only with a public space such as the Boston Commons. The commons, that is what was shared among the members of the group, originated with the first humans living on the savannas of what is now called Africa. The commons then, as well as now, can be thought of in terms of the cultural commons and the environmental commons. The cultural commons includes the intergenerational knowledge of how to prepare a meal, the narratives that pass on the group's moral values (which may still not represent our notions of social justice), knowledge of and skill in building something useful, knowledge of the medicinal characteristics of plants, expressive arts and ceremonies, language, mentoring in a wide range of crafts and artistic talents, and earlier, at the time of the Magna Carta in 1215, the beginnings of such shared civil liberties as habeas corpus. The environmental commons, then and now, include shared access to forests, rivers, oceans, air, animals, air, and so forth.

### **Forces Enclosing the Cultural and Environmental Commons**

There is another metaphor that describes an equally ancient practice—and that word is “enclosure”. In the early stages of human history, enclosure (that is, the process of excluding certain groups from equal access to the cultural and environmental commons, took many forms. These included exclusions based on gender distinctions, the emergence of hierarchically organized societies based on status and class differences, mythologies that invested special individuals with extraordinary rights and privileges, and so forth. The introduction of private property and a money economy have also played key roles in how the process of enclosure occurred in different cultures. It is important for educational reformers to understand that the same tensions exist between the intergenerational knowledge, skills, and mutually supportive relationships that still exist in rural and urban areas in the West and the increasingly powerful forces of enclosure that are driven by the market liberal ideology that has no self-limiting principle (Daly, 1991). The modern secular trinity of science, technology, and capitalism, as well as the silences of classroom teachers and university professors about the nature and importance of the cultural and environmental commons, along with how they reinforce many of the cultural assumptions that underlie the current expansion of the industrial/consumer oriented culture, lead most people to accept as part of the natural progression in life the transformation of what was previously shared outside of a money economy into new products and dependencies.

While social justice oriented professors are attempting to reverse the long-standing traditions of enclosure based on race, class, and gender, and environmentally oriented scientists are working to reverse the enclosure of the environmental commons, the forces of enclosure continue to gain ground. For example, various conservancy groups are attempting to reverse the widely held taken-for-granted cultural assumption that everything must be privately owned or turned into a commodity or monetized service. Unfortunately their efforts are being undermined as corporations are now patenting gene lines as well as the indigenous knowledge accumulated over centuries of careful observation of the characteristics of the local bioregion. Other examples include the municipal water systems as well as aquifers located on public lands that are being taken over by corporations. Corporations, as well as governments in the pay of corporations, can now rely upon the World Trade Organization to repeal local restrictions on their right to enclose different aspects of the environmental commons. The enclosure of ethnic traditions of growing and preparation of food is gaining ground as food becomes more industrialized, just as intergenerational knowledge of healing is being taken over by the pharmaceutical industry. The creative arts, sports, games, and even such supposedly ecologically friendly activities as birding and jogging are being turned into market opportunities. The widespread use of cell phones and other electronic forms of communication encloses the knowledge of the older members of the community who are carrying forward the intergenerational knowledge of gardening, creative arts, working with clay, metal, wood, various fibers, and so on. These new technologies, in effect, undermine both face-to-face intergenerational communication and the importance of tacit knowledge that are essential to mentoring relationships that lead to self-reliant and mutually supportive skills. They also reinforce the illusion of being an autonomous individual, which the industrial culture transforms into being a customer. (Sale, 1995, p. 18).

The cell phone, like the computer games that now occupy so much of people's free time that previously may have involved talking with neighbors and participating in mutually supportive activities, is an example of how the many forms of enclosure are interpreted as the latest expression of progress. One only has to ask if the cell phone generation has any understanding of the combination of techno-scientific, market, and ideological forces that are undermining the traditional values and institutions that protected people's privacy, and the political checks and balances necessary in maintaining a democratic society. Do they understand the Janus nature of computers, and other modern technologies? Do they recognize that bottled water and now restaurants in Mexico City where oxygen can be purchased represent the further enclosure of what remains of the environmental commons?

It would be unfair to leave the impression that the cell phone generation is unique in participating in the enclosure of the cultural and environmental commons—as the majority of adults who have gone through the educational system are also trapped in the mind-set that equates the expansion of markets, and the accompanying loss of intergenerational knowledge of how to live less consumer dependent lives, with progress. It is also important to recognize that even though classroom teachers and professors daily participate in different aspects of their local cultural commons (that is, in activities, relationships, and in the exercise of skills that have not been entirely monetized) few are aware that this ancient pathway of human development needs to be revitalized if we are

to slow global warming and the other changes occurring in the Earth's ecological systems. Silence and the loss of memory are also powerful forms of enclosure that lead to greater dependence upon the money economy --which is an increasing problem for billions of people, including people in the industrialized West.

Before taking up the issue of how schools and universities in the West are complicit in promoting the double bind thinking that is contributing to overshooting the sustaining capacity of natural systems, it is necessary to say a few words about another possible area of misunderstanding—especially on the part of social justice activists who are aware that there are traditions within the cultural commons of many groups that are sources of exclusion and exploitation. Romanticizing the cultural commons needs to be avoided. The aspects of the cultural commons being discussed here represent the more community-centered activities, skills, knowledge that are less dependent upon consumerism—and thus are less dependent upon the industrial processes that are major contributors to global warming. An ethnography of the forms of enclosure existing in many cultures, particularly the forms of enclosure related to gender, social class, ethnic, racial, other prejudices, will reveal how they are sustained by the intergenerational narratives—and by the shared language that carries forward the cultural group's way of understanding the attributes of the other participants in the society. Social justice activists who are working to overturn these forms of enclosure are really working to ensure that these marginalized groups have equal access to what is being identified here as the constructive, life-enhancing aspects of the cultural commons.

However, what these social justice activists often ignore is that their efforts to transform the various forms of enclosure into opportunities to participate more fully in the consumer/money dependent culture fail to address how this narrow interpretation of equality of opportunity further expands the industrial/profit oriented economy that contributes to global warming. That is, equality of opportunity too often is translated in terms of participating in the political system and the economy of consumerism—rather than balancing the need to overcome poverty and political marginalization with the need for personal development that comes from participating in the cultural commons of the arts, ethnic traditions of slow food, and mentoring relationships.

To summarize several key points. Enclosure may take many forms, but the two most important are the ways in which the largely non-monetized relationships and activities within communities are being monetized, thus turning traditions of community self-sufficiency into new forms of dependency. Enclosure also refers to how marginalized groups are being excluded from participating in the cultural commons—ranging from participating in the creative arts, being equally represented in the culture's narratives of people who have made outstanding contributions to the community, to being protected by the culture's traditions of civil liberties and moral reciprocity. If the reader thinks that I am suggesting that we return to main pathway of human history before the rise of industrial/capitalistic culture she/he would be entirely mistaken. This mistaken way of thinking is a reflection of the silences and prejudices that need to be addressed if we are to live less consumer dependent lives—and thus, less environmentally destructive lives.

## **Regenerating the Cultural Commons as Alternatives to Consumerism**

A careful mapping of what remains of the cultural commons in communities, whether in the West or in other parts of the world, will reveal that there are many intergenerationally connected activities and relationships that people engage in—indeed, that are a taken-for-granted part of everyday life. Thus, the argument is not that we should return to a pre-industrial and pre-monetized past; rather, it is that we need to recognize the existing community-centered alternatives to a hyper-consumer dependent lifestyle that is overshooting what Earth's natural systems (Mander and Goldsmith, 1996). What is being recommended is that educators make the revitalization of these alternatives part of their reform agenda. Most educators will have little to contribute in terms of developing the new generation of technologies that have a smaller carbon footprint, but they can contribute by recognizing how their silences, prejudices, and taken-for-granted cultural assumptions are undermining the community-centered sites of resistance to the cultural forces that are major contributors to global warming.

If pedagogical and curricular reforms are to contribute to a lifestyle that is less dependent upon consumerism it will be necessary to obtain a general idea of the nature of double bind thinking. As I have written elsewhere about the process of how the metaphorical language used in classrooms often reproduces the misconceptions of the past, it will be necessary to provide only a short summary—especially if I am going to discuss the pedagogical and curricular reforms that need to be undertaken. As pointed out in the just completed book manuscript, *University Reform in an Era of Global Warming*, and in an article recently published in the online journal, *Language and Ecology* (Bowers, 2007a), double bind thinking occurs when the analog associated with a metaphor used today is derived from past thinkers who were addressing problems of their times—but who were unable to understand today's world of cultural/linguistic diversity, environmental limits, and connections between poverty and the modern forms of enclosure.

A very complex history of the misconceptions and class influences on today's use of metaphors that provide the conceptual and moral schemata that marginalizes the awareness of the commons, as well as supports the industrial/market oriented path of development, can be summarized by two examples. The first has to do with how many of the major philosophers in the West represented their respective epistemologies as being free of cultural influences. Indeed, it was Plato who introduced the idea of “pure thinking” that was not dependent upon experience—and certainly not on his culture's way of knowing. Plato also contributed to the long history in the West that represented narratives as unreliable sources of knowledge. Rene Descartes, John Locke, and John Stuart Mill, in their different ways, also contributed to the current idea that thinking (or the rational process) is free of cultural influences. The analog that leads educators today to think of the individual as an autonomous thinker (or at least has the potential to become one) can be traced back to the analogies established by these early philosophers. The analog for thinking about how private property came about can be traced back to the writings of John Locke, just as the analog for what a free market is like can be found in Adam Smith's *Wealth of Nations*. And the current analog that continues to influence how many people, including classroom teachers and professors, understand the nature of tradition can be found in the way early Enlightenment thinkers associated the word with the oppressive nature of the church, and the remnants of feudal society.

The analogs constituted by earlier theorists who framed their understanding of other cultural ways of knowing in terms of deeply held prejudices, who did not recognize the nature and importance of the local cultural commons—including its more oppressive characteristics, who assumed that exercising greater rational control over people's lives and nature required rejecting all traditions, and who ignored the possibility that humans could destroy the environment they depend upon, have contributed to today's silences about and the marginalization of the intergenerational knowledge that sustains the local cultural commons.

As mentioned earlier, the first step in addressing the cultural roots of the ecological crises is to become aware of the analogs that provide the schema of understanding that people associate with such words as tradition, progress, individualism, community, and so forth. Classroom teachers and professors, after being prompted by feminists, engaged in the process of establishing new and more accurate analogs for thinking about the roles of women and men. The metaphor of woman can now be associated with doing scientific research, being a mathematician as well as an artist and a politician; while the new analog (less successfully established) for what a man "is like" includes becoming responsible for parenting and having the capacity for the expression of a wide range of emotions. Awareness that words (iconic metaphors) have a history and may be associated with analogs that represent the misconceptions of earlier thinkers should be constantly promoted in the classroom.

### **Mediating Role of Classroom Teachers and University Professors**

Other educational reforms need to be undertaken. Perhaps the most important is for classroom teachers and university professors to learn how to become mediators who help students become explicitly aware of the differences in their experience when participating in activities of the cultural commons and when participating in the relationships and activities that are part of the consumer/ monetized culture (Bowers, 2007b). Few students are encouraged to think about these differences. This prevents them from developing the vocabulary necessary for articulating the differences in how commons and market-based experiences affect the discovery of their own personal interests and talents—as well as to recognize which has the larger environmental impact. Whether the nature of the relationship strengthens their sense of community or of being an anonymous customer, and whether the experience contributes to a feeling of dependence or empowerment, are questions that are also ignored as they move from cultural commons to consumer/market-based experiences without giving attention to the differences. The role of the mediator is not to give the students ready-made answers to these existential questions, but to encourage them to do what the anthropologist Clifford Geertz referred to as "thick description" (1973). Geertz explained the nature of thick description by using Gilbert Ryle's example of two physical acts: an involuntary wink of the eye, and the wink that is intentional. Thick description clarifies the background relationships that lead to the intentional wink of the eye. Thus, thick description involves considering the role that memory, previous relationships, social class issues, shared understandings, and all the other background information that needs to be taken into account in understanding the motives behind the message being sent—and how it is interpreted by the other person.

Feminists engaged in thick description when they made explicit how language perpetuated gender biases, the history of political, economic, and social class issues, their own personal experiences, the assumptions encoded in the language about the attributes that separate women from men, and so on. Other social justice movements have relied upon thick description to justify their reform agendas. Thick description leads to the expanded vocabulary that is necessary for exercising communicative competence in determining what should be conserved and what needs to be changed. In the early grades this may take the form of encouraging students to describe the experiential differences between face to face and computer-mediated communication. In the later grades, the differences between being in a mentoring relationship and working on an assembly line, between growing food for the local market and buying food shipped from half way around the world, between participating in an ethnic ceremony and reading about such a ceremony, between engaging with others in one of the community's creative arts and being a consumer of other people's performance, all need to be discussed. The discussions, however, need to be based on the student's thick description of their embodied/culturally influenced experiences, and not on abstract (that is, textbook) representations of these various activities.

There are also issues specifically related to the differences between the students' culturally mediated place-based and embodied experience and the abstract language (context-free metaphors) that too often have no connection with everyday life—including such metaphors as “freedom”, “technology”, “equality”, “progress”, “rationality”, “democracy”, and so forth. Mediating involves helping students examine whether these abstract metaphors fully represent relationships, forms of dependency, meaning, different patterns of reciprocity, discovery of interests and talents, and networks of mutual support. For example, does the metaphor “tradition”, given the Enlightenment derived analog that many non-ethnically grounded students take-for-granted, accurately represent the range of traditions that are re-enacted in everyday life? Does the metaphor “democracy” accurately account for the multiple ways in which everyday experiences are being electronically tracked by corporations and government agencies? The process of mediating, which helps students become explicitly aware of the multiple differences between their commons and industrial/consumer-based experiences, may at times lead to recognizing that certain aspects of the industrial/consumer culture represent genuine achievements, and that other aspects cannot be reversed and thus require a more skeptical attitude—one that does not assume the inevitability and progressive nature of new technologies and consumer goods.

Thick description enables students to acquire the communicative competence necessary for challenging and negotiating new understandings, for resisting forms of economic enclosure that increase dependency and poverty, for reforming aspects of the cultural commons that are sources of injustice, for learning how to engage with others in cultural commons activities that strengthen community and that have a smaller ecological footprint. If students are unable to articulate the differences as they move between the commons and the industrial/consumer based experiences, they will be yielding a central feature of the morally coherent cultural commons to the forces of enclosure. This claim is not based on abstract thinking. If we consider how groups ranging from local organic farmers, political activists resisting different forms of enclosure, to the local performing arts group, we find that participatory democracy is the primary approach to group



decision making. But it's a form of democracy that is based on an awareness of community interdependencies, and an understanding of how the well-being of the community leads to the development of the individual's talents and sense of mutual support. Participatory democracy is as inherent to most forms of the cultural commons as the loss of local decision making is to the different forms of enclosure.

A mediating approach to education also involves helping students acquire an historical understanding of the local cultural commons as well as the forces that are relentlessly transforming what remains of the commons into new markets. Given the increasing pace of everyday life, where the ugly word "multi-tasking" is used to convey a sense of normality, students have little time to consider the historical origins of the cultural forces contributing to undermining their community's traditions of self-sufficiency, as well as the cultural forces contributing to global warming. The multiple ways in which the idea of progress is reinforced further marginalizes most students' interest in learning to discriminate between the traditions that are ecologically sustainable and the traditions that are adding to our social and ecological problems. Thus, the role of the classroom teacher and university professor also includes engaging students in a discussion of the history of current forms of enclosure. The historical perspective may include a discussion of how literacy became privileged over orality, where the idea of free-markets came from—and whether today's interpretation took account of Adam Smith's understanding of how a face-to-face community would reduce the tendency to exploit other members of the community. Introducing an historical perspective will also clarify whose analog is encoded in the idea that there is such a thing as objective data and that technology is a culturally neutral tool, as well the origins of the idea that cultures follow a linear line of development from primitive to modern.

The historical perspective also needs to be part of the discussion of various ideologies, economic theories, philosophies, and so forth. The key questions that students should consider include: Did theorists such as Plato, John Locke, Karl Marx,, John Dewey, Paulo Freire, etc., understand the nature and importance of the world's diversity of cultural commons? Or do their respective theories promote the development of a global culture that does not recognize the dangers of living beyond what the Earth's ecosystems can sustain? Another question that needs to be raised is why most of today's academics do not engage students in a discussion of how the misconceptions of these earlier thinkers have put us in the double bind of pursuing a form of development that is environmentally unsustainable.

The rapid changes in the climate and other ecosystems may prompt some academics to follow the path taken by other social reformers, which was to create an abstract theory for guiding social reforms that did not take account of local cultures. We have been down the many pathways promoted by these well-intentioned theorists and social reformers. In most instances, the results have been disastrous—especially for Third World cultures. We now need to follow the lead of the on-the-ground practitioners of sustainable living, such as environmentally-oriented architects, urban planners, organic farmers, people living lives of voluntary simplicity, community volunteers, and the people engaged in a wide range of cultural commons activities that still survive in communities around the world. That is, the pathway we need to take in order to reduce the human impact on the Earth's natural systems does not have to be invented and then imposed on the people. Rather, it already exists in as many ways as there are cultures.

## **Acknowledging the Challenge of Einstein's Insight**

The challenge is how to awaken professors of education, as well as other academics, who continue to base their lives, teaching, and scholarly research on the assumption that taking care of the environment is the responsibility of scientists and environmental educators. The cultural assumptions that have led them to relegate the intergenerational knowledge that has a smaller ecological footprint to low status by leaving it out of the curriculum, and to reinforce the patterns of thinking and values required by the industrial/consumer oriented culture, are still likely to be taken-for-granted even as professors and classroom teachers read the scientific reports about the dire consequences that lie ahead. Unfortunately, like so many conceptual double binds that professors take-for-granted, too many are willing to leave the challenge to the techno-scientists who control the discourse on how to reduce global warming.

It is a mistake to think that the university's complicity in promoting the forms of thinking that are exacerbating the ecological crises is a result of a combination of hubris and ignorance—though these elements cannot be dismissed entirely. Rather, the problem may be rooted in a lack of awareness of how to acquire at this stage in their careers the language that will enable them to participate in a discourse that highlights the tensions between the diversity of the world's cultural commons and the economic forces of globalization. The discourse of double bind, ethnocentric, and anthropocentric thinking feels safer, and does not raise questions about why careers have been based on these misconceptions.

Energetic leadership on the part of university presidents, provosts, and deans does not always fit well among academics who promote the idea of equality and freedom for everyone to pursue their own interests. Nevertheless, this is exactly what is now needed. It was certainly missing in the leadership of the women and men who framed the agenda for the recent conference of the American Educational Research Association. The efforts of the British Environmental Association of Universities and Colleges, as well as the American counterpart, the Association for the Advancement of Sustainability in Higher Education, represent hopeful signs that there is a growing recognition that environmental issues must be introduced in courses across the disciplines. But the success of these organizations in bringing about the paradigm shift that the editors of this journal are calling for remains very much in doubt. Too often the support on the part of the highest levels of the university administration is limited to reducing the carbon footprint by introducing more energy efficient technologies, and to hiring environmental coordinators to handle recycling issues. And encouraging faculty to introduce readings and discussions of environmental issues too often is undermined by the failure of faculty to recognize how the other aspects of their courses are still based on the cultural assumptions constituted in the distant past before there was an awareness of environmental limits—and the promise of industrialization seemed a sure pathway out of poverty and stunted lives.

There is another problem that only energetic leadership on the part of university administrators can address: namely, the liberal ethos that most faculty take-for-granted means that it is still a matter of personal choice about whether they will take the time and make the effort to learn about the cultural roots of the ecological crises and how their teaching and scholarly writings may be part of the problem. Administrators need to exert

leadership by declaring a moratorium that may last several weeks, and perhaps longer, that would provide the opportunity for an in-depth examination of just how serious the ecological crises are, the consequences of ignoring them—including the impact they are already having on people's lives and on habitats and species. The moratorium should lead to a basic discussion of how to reconstitute the basic conceptual foundations of courses in ways that address both the misconceptions of the past that are exacerbating the crises and the ways in which students can live less consumer and individually centered lives.

The current approaches to environmentally-oriented conferences provides an opportunity of like-minded faculty to share ideas and to gain the feeling of empowerment from knowing that there are others who share their deep concerns. But the reality is that environmentally oriented faculty outside the sciences are still the minority in the various departments of the university, which means that students continue to encounter pre-ecologically informed ways of thinking in the majority of their courses. This is why the top levels of the university administration need to take a more pronounced leadership role that goes beyond supporting energy audits and retrofitting the physical plant with more carbon reducing technologies. Transforming the consciousness of administrators, of the people who organize environmental conferences, as well as the more traditional academic conferences, to recognize the nature of the double binds their thinking is still caught in will be a real test of the currently held myth that progress is inevitable—regardless of what we do.

## References

- Bateson, Gregory. 1972. Steps to an Ecology of Mind. New York: Ballantine Books.
- Berger, Peter, and Luckmann, Thomas. 1967. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Garden City, NY: Anchor.
- Berthoud, Gerald. 1992. "Market". In The Development Dictionary: A Guide to Knowledge as Power. Edited by Wolfgang Sachs. London: Zed Books.
- Bowers, C. A. 2001. Educating for Eco-Justice and Community. Athens, Georgia: University of Georgia Press.
- \_\_\_\_\_. 2007a. "Philosophy, Language, and the Titanic Mind-Set". Language and Ecology, Vol. 2, No. 2. pp. 1-16. [www.ecoling.net/journal.html](http://www.ecoling.net/journal.html)
- \_\_\_\_\_. 2007b. "Handbook for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses". <<http://cabowers.net>>
- Daly, Herman E. 1991. Steady-State Economics. Washington, D. C.: Island Press.
- Dawkins, Richard. 1976. The Selfish Gene. New York: Oxford University Press.
- Geertz, Clifford. 1973. The Interpretation of Cultures. New York: Basic Books.

- Gouldner, Alvin. 1979. The Future of Intellectuals and the Rise of the New Class. New York: Seabury Press.
- Grabowski, Jan. 2007. "Consumed by Consumerism: The Persuasive Discourse of Financial Institutions". Language and Ecology. Vol. 2, No. 2. pp. 1-15. <[www.ecoling.net/journal.html](http://www.ecoling.net/journal.html)>
- Hawkins, Paul, Lovins, Amory, and Lovins, L. Hunter. 1999. Natural Capitalism: Creating the Next Industrial Revolution. Boston, MA.: Little, Brown, and Company.
- Mander, Jerry, and Goldsmith, Edward. 1996. The Case Against the Global Economy and for a Turn Toward the Local. San Francisco, CA: Sierra Club Books.
- Heidegger, Martin. 1962. Being and Time. New York: Harper & Row.
- Reddy, Michael. 1979. "The Conduit Metaphor—A Case of Frame Conflict in Our Language and Language". In Metaphor and Thought, edited by Andrew Ortony. Cambridge, England: Cambridge University Press. Pp. 284-323.
- Sale, Kirkpatrick. 1995. Rebels Against the Future: The Luddites and Their War on the Industrial Revolution. Reading, Massachusetts: Addison-Wesley.
- Stibbe, Arran. 2005. "Ecology and the Magic of Economics". Language and Ecology. Vol. 1, No. 4, pp. 1-6 <[www.ecoling.net/journal.html](http://www.ecoling.net/journal.html)>
- Stiglitz, Joseph. H. 2002. Globalization and Its Discontents. New York: W.W. Norton.
- Wilson, E. O. 1998. Consilience: The Unity of Knowledge. New York; Alfred A. Knopf

## **Chapter 5: Rethinking Social Justice Issues within an Eco-Justice Framework**

As the social justice issues of class, race, and gender have been the dominant concern of many educational studies faculty over the last decades, it is now time to ask whether the recent evidence of global warming, changes in the chemistry of the world's oceans, and the increasing shortage of potable water should lead to developing a new strategy for ameliorating these long standing injustices. Given the amount of time devoted to discussing class, race, and gender issues, as well as the number of books that focus on these issues, very little has been achieved in affecting the systemic changes required for marginalized social groups to participate on more equal terms in the public arenas of politics, economics, and educational opportunities. Corporations continue to shape governmental policies that deepen the economic plight of marginalized groups that live at the bottom of the wage scale, while raising the cost of drugs and medical care

beyond what they can afford. The Supreme Court continues to be ideologically oriented toward restricting the role of government in addressing social justice issues. Overall, the democratic process itself has become degraded by corporate and other special interests to the point where millions of people continue to be mired in poverty and hopelessness.

The recent acceleration of economic globalization and the deepening of the ecological crises that are now impacting people's daily lives suggest that a radical rethinking of how to address social justice issues is needed. The growing awareness of these global developments, along with a weakened labor movement, the decline in the size in the middle class, and a need to change the ecological impact of all citizens (even that of the poor who have not been educated about how to live less environmentally destructive lives), means that the old assumptions about achieving a more socially just society have to be re-examined.

Social justice thinking has largely been framed in terms of middle class assumptions about individualism, progress, a world of unlimited exploitable natural resources, and education as a source of individual empowerment. The ultimate goal of achieving greater social justice for marginalized groups has been to enable them to participate on equal terms in the areas of work, politics, and the culture of consumerism. Ecojustice thinking, on the other hand, takes account of the impact of the consumer dependent lifestyle that is being promoted in our public schools and universities by asking whether it is largely responsible for the economic and cultural colonization of Third World societies, as well as the environmental racism that exposes minority groups to the toxic chemicals that the industrial/consumer oriented culture relies upon. Ecojustice thinking also brings into focus the need to consider the existing community-centered alternatives to the deskilled individual lifestyle that is increasingly dependent upon consumerism—even as the sources of employment become more uncertain because of outsourcing to low wage regions of the world, and the drive to increase profits by replacing workers with computer driven machines. As the life-sustaining ecosystems become more degraded, there is also the question as to whether the current industrial/consumer oriented lifestyle that is taken-for-granted by many educational advocates of social justice is undermining the prospects of future generations. Other concerns of ecojustice thinking include the need to undertake educational reforms that address our responsibility for leaving future generations with sustainable ecosystems, which also means recognizing the right of non-human forms of life to reproduce themselves in sustainable ways. The priorities of ecojustice advocates are thus both more global in terms of analysis and accountability, and more local in terms of educational strategies that reverse the process of deskilling that was part of the destruction of community systems of mutual support that began with the rise of the techno-scientific based industrial culture.

While the environment is being degraded to the point where the scarcity of sources of protein, water, and energy is driving up prices, thus further impoverishing the already poor, the advertising industry is spending billions of dollars a year in order to perpetuate the public's addiction to consuming the latest fashions, technologies, and forms of entertainment. Public awareness of the environmental changes that scientists are warning about is further obfuscated by the big box stores and shopping malls that stock their shelves with a super abundance of consumer products—thus further perpetuating the illusion of plentitude. Glitz, easy credit and an indifference to the

dangers of going deep into debt, are just part of the culture that now dominates the majority of the people's lives—that is, those who have not lost their well paying jobs, health and retirement benefits, and are now reduced to a minimum wage lifestyle. The poor and marginalized-- ranging from single mothers, urban minority youth, migrant farm workers, and a wide range of people whose skin color and lack of educational background that disqualifies them from other than menial forms of labor in industrial food outlets and other low paying service industry jobs, are too focused on meeting the most basic needs of food and shelter to be aware that there are community-centered alternatives to the industrial/consumer lifestyle that have been excluded from participating in. As Barbara Ehrenreich pointed out in a recent interview with Bill Moyers, the poor live so close to going over the edge that going without pay for the couple of weeks it takes to find a more high-paying job is unthinkable. In effect, poverty restricts even this most basic option that the middle class can take for granted.

The central priorities of ecojustice advocates do not have their roots in abstract theory. Rather, the traditions of intergenerational knowledge and patterns of mutual support that enabled people to live in ways where market forces did not dominate everyday life have been around since the beginning of human history. They are still present in every community across North America and in other parts of the world. Historically, these traditions were known as the commons; that is, what is freely shared by the members of the community-- which also included local decision making. The norms that governed the cultural and environmental commons were passed along orally and differed from culture to culture. The Romans were the first to establish a written record of the commons, which they identified as the local streams, woods, fields, animals, and so forth. The cultural commons, which included the intergenerational knowledge and skills necessary for gathering, preparing, and sharing food, the medicinal properties of plants and where to find them, narratives of courage and of hubris, the rules that governed community members who violated local norms of justice, the sharing of technological skills and craft knowledge, the mythologies and prejudices that regulated who had privileged positions in the community, and so forth, have only recently been identified as part of the commons that still exist today along side of the liberal traditions of private property, anomic individualism, the expansion of the industrial approach to production and consumption, the growing hegemony of the capitalist ethos, and the rise of corporate power.

The relationships between the local cultural commons found in every community today and the industrial/consumer culture have not been mutually supportive. Indeed, the people who promote the expansion of the industrial/consumer dependent lifestyle, and thus the accumulation of capital, view the largely non-monetized cultural commons as markets to be exploited. Their goal is to replace intergenerational skills and patterns of mutual support with new technologies that must be privately owned and with expert systems that represent as sources of backwardness the traditional values and forms of knowledge--such as civil liberties, patterns of returning labor, mentoring, knowledge of how to live lightly on the land, etc. that have been the strength of many cultural commons. At the time the environmental commons in rural England were being transformed in the early stages of the Industrial Revolution, this process of limiting free access and use on a none monetized basis, as well as overturning of local decision making, was referred to as "enclosure". That is, the enclosure of the environmental

commons involved the introduction of private ownership and integration into a money economy, which often led to decision making being transferred to distant owners—and later to corporations that made increasing profit the primary criteria for how the natural environment was to be exploited. Now that we can recognize the cultural beliefs and practices, which now include cyberspace, as part of the commons that enable community members to be less dependent upon a money economy, it is possible to recognize the many ways in which different aspects of the local cultural commons are being enclosed by today's market forces—as well as by ideologies, technologies, and the prejudices and silences. Public schools and universities continue to be complicit in reinforcing the cultural assumptions that further undermine the viability of the cultural commons even as environmental scientists are working to conserve what remains of the environmental commons.

While the diversity of the world's cultural commons currently represent sites of resistance to economic globalization, and while the local cultural commons that still exist in attenuated form across North America, it is important to avoid romanticizing the cultural commons. In many cultures, including our local communities, the cultural commons also include narratives and traditions that perpetuate different forms of discrimination and economic exploitation. That is, the stoning to death of the woman who seeks to marry outside of her tribe, the market liberal ideology that equates social progress with an economy that makes survival of the fittest the ultimate test of individual success, and the various forms of racial, class, and gender prejudices also have their roots in the traditions of the cultural commons. And these non-monetized traditional beliefs and practices (which have dire economic and social consequences for those who are the subjects of discrimination) were and still are generally sustained in communities which may also possess the same networks of mutual support that are also a necessary part of the more self-sufficient activities that reduce reliance on consumerism—and that have a smaller ecological footprint.

The local cultural commons should not be regenerated and supported just because they represent alternatives to the industrial/consumer oriented culture that is being globalized and that put at further risk the possibility of achieving a sustainable future. Rather, the different traditions of the cultural commons need to be examined in terms of whether they support traditions of civil liberties, moral reciprocity in the treatment of all members of the community as deserving the right to an equal opportunity to develop their personal talents and to making their contribution to regenerating the life supporting cultural commons. Challenging the traditions of the cultural commons that are sources of exploitation and marginalization should also be part of participating as equals in determining how to align daily practices with the more global and ecologically informed priorities of an ecojustice pedagogy.

As pointed out in C. A. Bowers' online [Handbook for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues Into Their Courses](#), (2007), the unique characteristics of the cultural and environmental commons require a radically different approach than the current emphasis on making emancipation, the students' construction of their own knowledge, and the meeting of higher test scores the primary foci of educational reform. There are a number of unique characteristics of the cultural commons that an ecojustice pedagogy needs to take into account. The first is that most of the traditions that members of a community participate in on a daily basis are taken-for-

granted, such as the tradition of English speakers using the subject-verb-object pattern of oral and written communication, writing from left to right, assuming they are innocent until proven guilty before a jury of peers, and that language is a conduit in a sender/receiver process of communication—to cite just a few of the taken-for-granted patterns of daily life. The taken-for-granted status of most aspects of the local cultural commons is important for several reasons. In being part of tacit, contextual, and largely taken-for-granted experience, they are mostly excluded from the curriculum of public schools and universities. And in being excluded from the curriculum at all levels of the formal education process, and in being largely taken-for-granted by members of the community who are at the same time being constantly indoctrinated with the message that change is essential to progress, the loss (that is, enclosure) of different traditions of the cultural commons goes unnoticed—except for the people who are consciously carrying forward one of the traditions of the cultural commons, such as weaving, protecting civil liberties, craft knowledge and skill in working different media, local theater, and so forth.

The taken-for-granted nature of most traditions of the local cultural commons, which may include racist and gender forms of discrimination, is just one of the characteristics of the cultural commons that requires a different approach to teaching and learning that is found in current approaches that are based on many of the same cultural assumptions (or what I have referred to elsewhere as root metaphors) that underlie the industrial/consumer oriented culture that is overshooting the life sustaining capacity of natural systems. The emphasis on achieving greater individual autonomy, assuming that change is inherently progressive, and thinking that humans have a right to exploit nature or to treat it as an insignificant backdrop to the various human scenarios, all serve to further marginalize an awareness of the importance of the cultural and environmental commons.

Another bias in current approaches to education that can be traced back to Plato's argument that "pure thinking" that leads to universal truths is more reliable than thinking grounded in embodied/culturally influenced experiences. The Western theorists overlooked that the abstract words they assumed were a more accurate source of knowledge than embodied/culturally nested experience actually encoded analogies that were constituted in the distant past by theorists who, like Plato, were unaware of their local cultural commons--or held it in contempt as low status knowledge. This tradition is still evident in the thinking of current educational reformers who assume that words such as individualism, democracy, tradition (which reproduces the Enlightenment assumptions of being a source of backwardness and special privileges), intelligence, progress, and so forth, have a universal meaning—and that these metaphors do not carry forward the misconceptions of earlier thinkers. This pattern of thinking further marginalizes an awareness of the embodied experiences in the different community traditions that are being referred to here as part of the cultural commons. One of the consequences of the silences about the nature and complexity of the cultural commons, as well as the constant reminder that traditions are impediments to progress, which is being reinforced in most areas of the public school and university curriculum, is that students enter adulthood without an awareness of the different cultural forces that are enclosing what remains of the cultural commons. For most of them, the industrial/consumer culture is the arena in which they will personally succeed or fail—and the outcome of their individual quest



remains disconnected in their thinking from the rapid rate of degradation of the world's ecosystems.

There is now a major body of writing that addresses both the various ways in which public schools reproduce the culture's traditions of class and other forms of discrimination, as well as the reforms that need to be undertaken in order to achieve a more equitable society. Criticism of prejudicial language, silences in the curriculum, preconceptions about the potential (or lack thereof) of already marginalized students, tracking and other systemic forms of discrimination, have been the mainstays of educational foundation and educational studies courses for the past several decades. While there have been some social justice gains, particularly in the areas of race and gender, there remains much to be done—especially since the changes resulting from economic globalization and the global warming will have the greatest impact on minority groups whose economic gains have been, at best, both minimal and remain fragile. Critiques of the beliefs and values that have kept people of color, women, and other people restricted by other class barriers have actually been critiques of the reactionary traditions of the cultural commons. Unfortunately, the theories that framed these critiques were not informed about the complex nature of the cultural commons. Indeed, the phrase “cultural commons” has not been used. The main consequence of this lack of understanding is that the aspects of the cultural commons that hold out the prospect of finding community-centered alternatives to the negative impact of the industrial culture have not been part of the well intended efforts to use the schools to contribute to a more just social order.

The use of a sociological interpretative framework seemed ideally suited to bringing into focus economic, political, and educational inequities. It also avoided the questions that would have arisen if a more anthropologically informed interpretative framework had been relied upon. Differences in cultures could easily have brought into question how notions of equality could be reconciled with the importance that has been given in recent years to the importance of avoiding cultural colonization. The ideals of equality and diversity do not easily fit together—unless, of course, one of the terms is treated in a ritualistic manner. Another limitation of the sociological interpretative framework is that it keeps the focus of analysis and recommendations for reform on human to human relationships, with the human/nature relationships being ignored. The evidence for this claim can easily be substantiated by reading the most influential educational writers who have had a huge influence on how the analysis of class, race, and gender have been framed—writers such as Samuel Bowles, Herb Gintis, Michael Apple, Henry Giroux, and Peter McLaren. Recently Bowles and Gintis have been writing about the commons, and McLaren has been trying to explain how Marxism can guide educational reforms that address issues of sustainability. The key point is that today's educational discourse on class, race, and gender continues to ignore, with only a few exceptions, the implications of the ecological crises for the very social groups they want to emancipate.

The use of the cultural commons as the conceptual framework for analyzing the various forms of discrimination, as well as for guiding educational reforms, has several advantages that a sociological framework lacks. To reiterate: the cultural commons represent all of the forms of knowledge, values, practices, that have been handed down over generations that have been the basis of individual and community self-sufficiency.

While the previous discussion of the reactionary and, in some cases, horrific practices of some of the world's cultural commons need be kept in mind, there are other characteristics of self-sufficiency that existed prior to what Karl Polanyi called the "Great Transformation" when the emergence of the industrial system of production led to the enclosure of the environmental commons (1957). In Rebels Against the Future: The Luddites and Their War on the Industrial Revolution (1995) Kirkpatrick Sale summed up how the survival and global expansion of the industrial system of production and consumption depended upon the enclosure of the cultural commons. As he put it,

All that 'community' implies—self-sufficiency, mutual aid, morality in the market place, stubborn tradition, regulation by custom, organic knowledge instead of mechanistic science—had to be steadily and systematically disrupted and displaced. All the practices that kept the individual from being a consumer had to be done away with so that the cogs and wheels of an unfettered machine called the 'economy' could operate with interference, influenced merely by invisible hands and inevitable balances" p. 38. Sale does not refer to the community traditions of self sufficiency as the cultural commons, but he accurately makes the point that the industrial/consumer-dependent culture requires the destruction of the different forms of intergenerational knowledge, skills and mutually supportive relationships that enabled people to live less money and thus less consumer dependent lives. In effect, he is describing how the success of the industrial system of production and consumption required the destruction of the local cultural commons. What is ironic is that the kind of individual required by the industrial/consumer-dependent culture is the autonomous individual being promoted by many of today's educational reformers.

Unlike the limited conceptual possibilities of a sociological interpretative framework and vocabulary, the cultural commons is the phrase that encompasses the traditions of community that are nested in larger governmental structures. These traditions, as mentioned earlier, range from local approaches to growing and preparing food as alternatives to industrialized and ecologically damaging approaches to food to intergenerational approaches to healing that differ from the highly monetized and industrial approaches of today's medicine (which are increasingly becoming dependent upon patenting indigenous knowledge of the medicinal properties of plants). They also include the creative arts passed on through mentoring that differ from the star system of commercialized music and visual arts, narratives of the labor, feminist, and civil rights movements rather than the mind-numbing television sit-coms that serve to hook viewers to the multi-billion advertising industry, and the traditions of civil rights that go back to the Magna Carta of 1215 and that are now being enclosed by the growing alliance between the government, corporations, universities, and the military establishment. A more fine grained analysis of the differences between the cultural commons and the industrial/consumer-dependent culture that is now being globalized would involve a discussion of the difference between community mentors and experts who have an ego and economic investment in imposing theory-based solutions on people's lives, the difference between face-to-face and computer mediated communication, the difference between traditions of returning work and work that has to be paid for, the difference between developing personal interests and skills and being a consumer of other people's talents, between the embodied experiences of being in nature and the embodied

experience of sitting in front of a computer screen with its often violent simulations that deaden the capacity for empathy and moral responsibility.

There are two other characteristics of the cultural commons that have special significance. The first is that they exist in every community and can only be fully recognized by an in-depth account of the cultural patterns that unconsciously influence the embodied experience of preparing and sharing a meal, playing a game, telling a story, writing poetry, marching in an anti-war demonstration, protesting experimentations and other forms of animal exploitation, working with others in renewing habitats, and so forth. The cultural commons are a given though largely unrecognized aspect of daily life—and can best be brought to attention through actual participation and ethnographic/phenomenological description rather than through abstract theory and print-based descriptions. The second characteristic that needs to be reiterated, especially in light of the rate of global warming, is that what the industrial culture had to destroy, as Sale put it, is what has a smaller adverse impact on the ecological systems that life depends upon.

Most aspects of the cultural commons in North America rely to some degree on what has to be purchased. However, even this small degree of dependence makes a great deal of difference in terms of meeting the criteria of eco-justice. By being more intergenerationally connected, a revitalized cultural commons reduces the need for a system of production that has to dispose of vast amounts of toxic wastes (usually in the neighborhoods of the poor and marginalized). It also reduces the need to exploit the resources of Third World cultures and to integrate them into a global market system. As these cultures are able to regenerate their own cultural commons they are able to resist more effectively the West's efforts to colonize them in the name of development, democracy, and modernization—god-words that are based on Western assumptions about individualism, progress, and the need to impose the American way on other cultures. The lifestyle that is more oriented toward cultural commons skills and activities of mutual support, and less on consumerism that is degrading the environment and thus the prospects of future generations, is meeting yet another concern of eco-justice advocates. In possessing the skills and participating in the community systems of mutual support, the individual is less dependent upon what has become a near totalizing market system and the legitimating ideology that equates the exploitation of species and habitats with progress. This characteristic of the cultural commons meets the last criteria of recognizing that natural systems have a right to reproduce themselves as part of the layered nesting of interdependent ecosystems—and not to be reduced to an economic resource.

This listing of the constructive and morally coherent characteristics of the cultural commons brings out what is missing in most of the educational discourse on how to eliminate discrimination in the areas of class, race, and gender. It also brings into focus that there are viable alternatives to the various scenarios of increasingly desperate lives that will result as global warming accelerates in the next few decades, as the world's oceans become less reliable sources of protein, and as droughts and severe weather systems contribute to mass migrations of people. The double bind of relying upon sources of energy to keep the industrial system expanding that, at the same time, contribute to accelerating the rate of global warming, will intensify the willingness of corporations to outsource production facilities not only to low wage regions but to regions that still have

easily accessed sources of energy—whether from fossil fuels, solar, wind, and wave action. As the ecological crises deepens, and the seemingly unrelenting drive to continue expanding profits in an increasingly stressed world becomes more difficult, it will be the people who continue to occupy the bottom rung of the economic/political/educational hierarchy who will again suffer the most.

The irony is that the ancient pathway of human development that still exists in local communities (even among the urban and rural poor), and that represents an essential part of a post-industrial alternative, continues to be ignored—even by the few educational theorists who are beginning to recognize the ecological crises. What now has to be avoided is the endless repetition that there is an ecological crises and that capitalism is the primarily responsible. Thoughtful people already understand the connections between the two phenomena. Instead, advocates of social justice need to explore the pedagogical and curricular implications of how to introduce students, including the already marginalized students, to the life enhancing possibilities that exist in the cultural commons of their local communities—and in the cultural commons of the dominant culture that protect the rights of various minority cultures. There is a direct connection between the enclosure of the traditions of democratic government, civil liberties, and the growing dominance of the alliance of corporations, politicians, and a military establishment that views its mission as protecting the global interests of market liberals and religious fundamentalists. There is also a connection between the number of marginalized groups who suffer the most deaths and catastrophic injuries from military actions that result from the logic of economic globalization. Knowledge of how to protest against the various forms of economic and cultural colonization, as well as how to live a more community-centered and less environmentally destructive lives is also part of the cultural commons—which includes the narratives of past protest movements, strategies that have proven most successful, and even songs and the iconography associated with peace.

### **Pedagogical and Curricular Implications**

The future prospects of the poor and marginalized are also tied to the future prospects of the cultural and environmental commons. As the cultural and environmental commons become further integrated into the market system, the first to be adversely affected will be the already poor and marginalized. With the outsourcing of work, automation that reduces the need for workers, and downsizing in order to improve corporate profits, the prospects of upward mobility that has been the hallmark of past generations, though unevenly realized, is being rapidly diminished. Given this reality, placing greater emphasis on educational reforms that help to regenerate the cultural commons should not be interpreted as meaning that all students, regardless of class and racial background, should not acquire the knowledge that will enable them to find work that is meaningful and that supports a basic standard of living. Just as the most aspects of the cultural commons requires some degree of dependence upon the industrial system of production and consumption, public schools and universities need to ensure that the students at the bottom of economic and social pyramid have the opportunity to learn what is required for careers and employment that are non-exploitive. At the same time, changes need to be introduced at all levels of the educational system that will enable all students to learn about the community-centered alternatives that will contribute to the transition to a post-industrial future—namely, the cultural commons. In discussing the

unique characteristics of a pedagogy and curriculum that introduces students to the ecological and community sustaining importance of the cultural commons, it is important to keep in mind that we are in a transition phase of cultural development. Thus, the following discussion of pedagogical and curriculum reforms must also be viewed in this light.

If we consider the basic tension between the industrial/consumer-oriented culture and the characteristics of the cultural commons that strengthen mutual support, development of skills and personal talents, and ensure moral reciprocity among all members of the community, it becomes clear what the role of the classroom teacher/professor should be. Instead of promoting the high status forms of knowledge and values that contribute to the further expansion of the industrial/consumer oriented culture, the role of the teacher/professor should be that of a mediator who helps students become aware of the fundamental differences between participation in the cultural commons and the culture of industrial production and consumption (Bowers, 2007). Being a mediator requires an understanding of what students are most likely to take-for-granted as they move daily between participation in both sub-cultures. The pedagogical task is to encourage students to name what would otherwise be taken for granted. Naming taken-for-granted patterns of thinking and behavior, as we learned from both the feminist and civil rights movements, helps to make them explicit--which is essential for developing communicative competence. Like the mediator in labor disputes, the mediator role precludes giving students the answers about which aspects of the cultural commons as well as the industrial/consumer-oriented culture that need to be rejected or renewed. The techno-scientific basis of the industrial culture has made many important contributions to improving the quality of human life, and now has the potential to help reduce our carbon footprint. Thus the task of being a mediator should not be reduced to that of an ideologue who has pre-conceived answers, and who enforces silence about what her/his ideology cannot explain. Similarly, ideology should not guide how the students are to think about their embodied experiences within the cultural and environmental commons.

The initial step in teaching and learning that fits the model of a mediator is to encourage students to describe their embodied/culturally influenced experience as they move between the two sub-cultures. There are specific questions that students need to be reminded to ask: such as, does the experience in a cultural commons activity contribute to the development of personal skills and the discovery of talents? Does it contribute to a sense of community self-sufficiency and mutual support? Does it require exploiting others who are less advantaged? What is its impact on natural systems? Does it contribute to an awareness of what needs to be intergenerationally renewed and of the need to be able to mentor others? Does it lead to different forms of empowerment, such as the ability to exercise communicative competence in resisting further forms of enclosure of skills and patterns of mutual support that result in an increased dependency upon a money economy? What is its ecological footprint? These same questions need to be explored by students as they participate in various aspects of the industrial/consumer-oriented culture.

The differences between preparing and sharing a meal with others and eating in a fast food outlet, between speaking and reading, between gardening and being dependent upon industrially prepared food, between participating in one of the creative arts and

being a consumer of commercially controlled artistic performances, between developing a craft tradition that extends one's talents and purchasing what has been industrially produced (increasingly in a low-wage region of the world) will quickly become apparent. And this awareness of differences, if framed in light of the ecological crises and the changes resulting from economic globalization, is essential to the recovery of local democracy that has been one of the hallmarks of the cultural commons that have not been based on ideologies and mythologies that have privileged the few over the many.

Another responsibility of the teacher/professor's mediating role is to ensure that students become aware of the narratives that provide an account of various social justice movements—starting with the earliest beginnings of the traditions of civil rights in the West—such as habeas corpus, the right to a fair trial by a jury of peers, the franchise, separation of powers, and an independent judiciary. The narratives that provide an understanding of the labor movement that struggled to achieve safe working conditions, a living wage, and the right of workers to organize politically, should also be part of the curriculum. The feminist as well as the civil rights movements also should be part of a commons-oriented curriculum. Again the tension between the cultural commons and the industrial/consumer-oriented culture that is now being globalized, and that is a major contributor to the ecological crises, will inevitably come out—and be a major focus of class discussions.

The ecological crises, as well as the increasing number of the world's population that is moving from a subsistence existence into one of dire poverty, makes it particularly important that the teacher/professor introduce students to the history of different forms of enclosure of the cultural commons. How did the Western philosophers' reliance on abstractions and unacknowledged culturally influenced interpretative frameworks (which can also be understood as root metaphors that frame the historically layered process of analogic thinking) contribute to the enclosure of the cultural commons? How has the rise of Western science contributed to the enclosure of local knowledge of healing, agricultural practices, reliance on local materials, and so forth? What role have various religions played in strengthening the cultural commons and, on the other hand, in representing the exploitation of the commons by market forces as carrying out God's plan for those who are to be saved? What were the intellectual influences that marginalized the importance of the worker's skills, their control of the tempo of work and use of technologies? What are the current techno-scientific and market forces that are threatening the diversity of seeds, and local knowledge of how to adapt agricultural practices to the characteristics of local soils, weather patterns, and so forth?

In addition to introducing, particularly as the students move into the upper grades and onto the university, the various histories of different forms of enclosure, the role of being a mediator also requires that students be introduced to how different cultures have sustained their cultural and environmental commons while at the same time ensuring that their markets did not come to dominate the patterns and values of everyday life. Knowledge of the intergenerational traditions of other cultural approaches to the cultural and environmental commons will enable students to gain a better perspective on whether the current myth that equates the Western scientific-technological market driven approaches to creating greater dependence on what is industrially produced and consumed should be the basis of colonizing other cultures. There is a need to enable a huge percentage of the world's population, including the marginalized social groups to

obtain a decent standard of living and to enable them to experience more than a life of drudgery and stunted development. The critical question is whether the further enclosure of the diversity of the world's cultural commons will achieve this end.

To this point, the discussion of the teacher/professor's role as a mediator between the students embodied/culturally nested experiences in the local cultural commons and in the workplace and shopping malls of the industrial culture has been general in nature. It is now necessary to address how to engage students from a variety of backgrounds that make them especially vulnerable to the prejudices, failure in acquiring the high-status knowledge that perpetuates poverty and deepens the ecological crises, and to accepting as low-status the cultural commons of their cultural group and community. As mentioned earlier, every group has its distinct intergenerational traditions of preferred foods, approaches to the creative arts, healing practices, ways of understanding moral reciprocity, craft knowledge, narratives of past achievements and leaders, mentors in various arts and crafts, understanding of what constitutes social justice, and so forth. If one goes to the largely Hispanic community in San Francisco they will find that many of walls of buildings the previously were used to advertise cigarettes and liquor have been reclaimed as part of the cultural commons. Giant murals now depict past struggles, important cultural leaders, and visions of what the future should hold for Hispanic communities. The same reclaiming of this part of the cultural commons can be found in Detroit and other major cities. Other examples of the cultural commons can be seen in the community gardens where traditional foods are grown, in the local poets, artists, writers, and musicians who are willing mentors of the community's youth. There are elders and people who take responsibility for keeping alive the oral history of the group, just as there are living traditions of how assist the especially vulnerable to the problems of extreme poverty, old age, and hopelessness. The nature of these cultural commons vary from community to community, from ethnic group to ethnic group, and in terms of the forces that see an advantage in keeping them impoverished. As the cultural commons of these ethnic and marginalized groups are nested in the cultural commons of the larger society, with its traditions of civil liberties, traditions of achieving legal redress of discriminatory practices and of affecting changes through an admittedly flawed democratic process, it is important that these traditions also be recognized as essential aspects of what marginalized students should claim as their cultural commons.

The starting point in a commons-oriented curriculum is to have students conduct a survey of their local cultural commons, as well as the aspects of the larger cultural commons that they have a right (in spite of past exclusions) to participate in. The survey should involve learning who the elders and mentors are, who the keepers of the community memory are, what forms of cultural commons activities exist—such as playing chess, painting, writing poetry, musical performances, gardening, working with wood and metal, volunteerism, political action groups, etc. In a word, the survey should cover the activities and relationships within the community that are largely independent of reliance upon a money economy—and that lead to the development of skills and interests that contribute to a less damaging ecological footprint. After the survey has been undertaken, the process of learning to make explicit the differences between their embodied/culturally nested experiences with different activities within the cultural commons and in the world of industrial work and consumerism can begin. This process of learning to recognize differences that otherwise are taken-for-granted as the student

moves between the two sub-cultures, and to name them, provides the linguistic and conceptual basis for the communicative competence that is necessary in resisting further forms of enclosure by market and scientific/technological forces. Resistance may take the form of overcoming the silences about the nature and importance of the local cultural commons being perpetuated by public schools and universities. It also may take the form of resisting the false promises of developers who want to attract the large commercial enterprises that will eliminate the small shop keepers and service providers—as well as the open physical spaces that enable members of the community to connect with the natural world, and to have community gardens and places for children and others to play and to escape the pressures of the media and the temptations of the shopping malls. Communicative competence is also necessary in giving voice to what aspects of the techno-scientific/industrial culture needs to be abandoned as ecologically unsustainable—and which aspects can make a contribution to improving the lives of people while still having a smaller ecological footprint.

One of the failures of the educational theorists who have been writing about the need for educational reforms that address the seemingly intractable problems of class, race, and gender discrimination is that they have continued to use the metaphors of “individualism”, “progress”, “emancipation”, “intelligence”, “tradition”, etc., that carry forward the analogs formed in the distant past by theorists who ignored cultural differences, the nature and importance of the cultural and environmental commons, and that there are ecological limits. In effect, the arguments for addressing the issues of race, class, and gender have been based on a metaphorical language that has been frozen over time, and that continues to put out of focus the intergenerational relationships and knowledge that provides alternatives to the form of individualism that is dependent upon consumerism to meet daily needs.

Learning to participate in what remains of the local cultural commons, and in developing new skills and non-monetized relationships will have the effect of expanding how intelligence is understood—from that of an individual attribute that is subjectively centered to understanding that intelligence is communal and enhanced through participation with others, and with the environment. Similarly, participating in the cultural and environmental commons will help to reconstitute how individualism is understood—from that of being autonomous and essentially alone to recognizing that one of the unique qualities of life is being in relationships that constantly lead to a redefinition of self. “Tradition”, which still carries forward the reductionist thinking of the Enlightenment writers, will also cease to be an abstraction that misrepresents the complexity of daily experience in both the cultural commons and in the industrial/consumer oriented culture. Instead of thinking the change is a progressive force, the embodied experiences within the cultural commons will lead to a more complex and critically informed understanding of which traditions need to be carried forward and renewed, and which traditions need to be rejected as environmentally destructive and as sources of injustice.

One of the metaphors that is in special need to being associated with new analogs is “environment” which is now understood as the background within which human experience takes place or as an exploitable resource. If the teacher/professor explains, and has students test out in terms of their own embodied experiences, how environments can be understood as ecologies—and that ecologies include both the interactions and



interdependencies within natural systems as well as within cultures (and the interdependencies between culture and nature) they are more likely to be aware of the different ways in which their activities impact the sustainable characteristics of natural systems. Students still rooted in the beliefs of their indigenous heritage will already have this awareness, but students who have been uprooted from their cultural traditions (which may not have been ecologically centered in the first place) will need to develop this awareness. And this awareness will be essential to slowing the rate of environmental degradation that will impact them the hardest.

The challenge now is for the proponents of educational reforms that address the issues of class, race, and gender to recognize that an approach to achieving social justice for the millions of marginalized students cannot be based on the same deep cultural assumptions that created the industrial/consumer-oriented culture largely responsible for the injustices that continues to stunt the potential of students. This challenge will be particularly difficult to address as few of today's proponents of educational reform have given attention to how language helps to organize their patterns of thinking in ways that reproduce the silences and cultural assumptions of past theorists who contributed to today's double-bind patterns of thinking that continues to equate progress with increasing the level of consumerism that is moving the world closer to the ecological tipping point scientists are warning about.

### **References**

- Bowers, C. A. (2007) Handbook for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses. Eugene, OR.: Eco-Justice Press. <<http://cabowers.net>>
- Polyani, Karl. (1957) The Great Transformation. Boston: Beacon Press.
- Sale, Kirkpatrick. (1995) Rebels Against The Future: The Luddites and Their War on the Industrial Revolution. Reading, MA.: Addison-Wesley.



