Toward a Post-Industrial Consciousness: Understanding the Linguistic Basis of Ecologically Sustainable Educational Reforms

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Chapter One: Introduction

Recent developments in higher education should be welcomed as the "Great Awakening".   Hopefully, with the establishment of the American Association for Sustainability in Higher Education, along with the American College and University President's Climate Commitment, the traditional relationship between higher education and the deepening ecological crises finally can be reversed. For many readers, the suggestion that higher education has been a major contributor to the form of development that is now being globalized and that is exacerbating the ecological crises, may cause deep consternation—especially if they were educated to thinking that their university education is the basis for our current level of economic prosperity and technological advancements. Indeed, a strong case can be made that the high-status knowledge promoted by colleges and universities was based on the same deep cultural assumptions that gave conceptual direction and moral legitimacy to the industrial/consumer dependent culture. The emphasis on individualism, the quest for new knowledge and technologies that would expand markets and thus dependency upon a consumer-based existence, the idea that the Western model of development should be promoted in other cultures, and the emphasis on print based storage and communication that fosters abstract thinking that, in turn, marginalizes the importance of cultural contexts and the diversity of cultural ways of knowing, were all packaged as the formula for escaping the constraints of the past and for participating in the achievements of the modern world. The Janus nature of higher education, while being a major contributor to an ecologically unsustainable lifestyle, has also made many genuinely positive contributions to expanding people's knowledge of how to overcome seemingly intractable limitations and prejudices, as well as of what needs to be conserved—especially in the areas of civil liberties and gains in social justice. These genuine achievements need to be kept in focus especially as higher education is criticized for its cultural hubris and failure to recognize how it continues to reinforce many of the misconceptions inherited from the past.

Unfortunately, knowledge of how to expand on the previous achievements in the areas of social justice, and on how to live more enriched lives by drawing upon the heritage of literature and the creative arts, have been overwhelmed by the ecologically problematic face of higher education—which has been to promote the individually-centered and consumer-dependent

lifestyle as well as the relentless drive to create the new technologies essential to the expansion of capitalism. It is not that the value of this lifestyle has been an explicit part of the university curriculum; rather it is learned through both the silences which allows the cultural messages of the consumer culture to go largely unchallenged and through the continual emphasis on equating change with progress, on individualism as the source of ideas and values, on representing language as a conduit in a sender/receiver process of communication that puts out of focus how language carries forward the earlier misconceptions, and on thinking of technological innovations and the expansion of consumerism as yet further expressions of modern development.   The shopping cart approach to selecting courses, where students often encounter conflicting interpretative frameworks, also facilitates the students' smooth transition from being a university student to being fully committed to the laissez-faire race to the top of the consumer and social status pyramid.

That these new national organizations are dedicated to reducing the ecological footprint of college and university campuses, and that there is a growing number (but still a minority) of faculty in the social sciences, humanities, and professional schools joining the science faculty who have for years been addressing environmental issues in their research and classes, represents a positive development. Nevertheless, the number of college and university presidents who are signing declarations that commit their institutions to becoming leaders in reversing the current state of environmental degradation falls far short of what is needed if colleges and universities are to contribute to the change of consciousness that will enable people to expand their symbolic rich universe while reducing their addiction of consumerism. Signing declarations, joining national organization dedicated to addressing environmental issues, and approving the adoption of more efficient technologies that modern campuses depend upon, are of minor significance when we consider what is really needed—which includes providing conceptual leadership in challenging the long held idea that the faculty member's academic freedom allows her/him to pursue subjectively determined scholarly interests while continuing to reinforce the cultural assumptions and silences that marginalize an awareness of the catastrophic consequences now facing an increasing number of the world's population

With scientists predicting that the world's cultures are now within 10 to 50 years of the tipping point where changes in human behaviors will not longer have an influence on slowing the rate of global warming, and with the scarcity of basic sources of protein and potable water

now reaching the point where riots are breaking out and large numbers of people are becoming environmental refugees, there is a need to recognize that the limits on academic freedom again need to be adjusted. And the adjustments need to take account of the current moral and social/ecojustice challenges we now face. The suggestion that the legitimate boundaries of academic freedom have been reframed in the past may come as a surprise to many faculty who are not aware that academic freedom has always been a social construction—and that it has not always served enlightened and humane ends. Indeed, there many instances in which it has led to scholarship and teaching that have challenged prevailing prejudices and forms of exploitation. It has also been influenced by the prevailing ideologies and economic interests of the times. For example, academic freedom, driven by the pursuit of new knowledge, was used in Nazi Germany to justify scientific experiments on populations regarded as sub-human and on political prisoners. Scientists in many Western countries who were part of the eugenics movement experimented on citizens who were categorized as defective. Not to be overlooked is how scientists working for the Public Health Service conducted what has become known as the Tuskegee experiments on 399 African American males who were suffering from syphilis. Their 40 year quest for new knowledge on how long it took these men to die was justified on the basis of academic freedom, and the pursuit of new knowledge.   More recent examples of how academic freedom have been redefined can be seen in the silences that scholars are no longer allowed to perpetuate. The growing awareness of the genocide and exploitation of the indigenous cultures across America, the oppressive nature of slavery, the traditions of hyper-patriarchy, and the long traditions of Social Darwinian thinking about the backwardness of Third World cultures have all led to shifts in the focus of scholarship and in teaching. In short, these silences are no longer justifiable on the grounds of exercising academic freedom. And the continued silence about the cultural roots of the ecological crises on the part of many faculty in the social sciences, humanities, and professional schools should no longer be accepted.

The scope and momentum of the ecological crises that are now affecting even the lives of academics and college and university presidents now require another reframing of what is allowed and not allowed in the name of academic freedom. I could list the title of many scholarly papers still being presented at academic conferences as evidence that most faculty in a wide range of disciplines need a wake-up call about the environmental and cultural turning point that some leading scientists are referring to as the sixth extinction. At the very least, faculty who

continue to ignore the ecological crises need to hear scientists explain just how degraded the oceans have become, the short and long term implications of global warming and its impact on glaciers, the changes in habitats, and the threat to species and sources of food. The importance of the turning point that humans are now facing would seem to justify faculty in all the disciplines reading books such as Jared Diamond's Collapse: How Societies Choose to Fail or Succeed; Joseph E. Stiglitz's Globalization and Its Discontents; and David Korten's Navigating the Great Turning: From Empire to Earth Community, among others.

While science faculty have been focused on environmental issues for a number of years, there is a small yet growing number of faculty in the non-scientific disciplines who are introducing environmental issues-- especially environmental writers-- into their courses. However, they continue to be a minority in their departments, and it has only been recently that they are no longer being penalized for engaging issues that were seen by colleagues as lacking scholarly legitimacy. What still characterizes colleges and universities is the continued dominance of the same laissez-faire ideology that now is the basis of economic globalization. That is, faculty are free to choose whatever line of inquiry that interests them, and that will strengthen their standing within the department and discipline. The assumption, which is also held by those who embrace laissez-faire as the basis of an economic policy, is that while many of the scholarly interests of faculty will add little to the well-being of humankind, and that some may even be destructive, the pursuit of a few faculty will reach a level of achievement that others will build upon. This laissez-faire approach in both scholarship and economics appears, at first glance, to be responsible for the material achievements now enjoyed by many people in the West and in the non-Western countries that have adopted our approach to development. As many environmental scientists, and as the people suffering the physical and economic effects of an increasingly degraded environment are telling us, this first glance is highly deceptive. We are now on a slippery slope that will lead to more privation, more wars over increasingly scarce resources, and more unnecessary deaths. What is now needed is an understanding of the cultural forces that have put us on this slippery slope, as well as an understanding of the changes in consciousness that will help avoid what lies at the end of the decent into social chaos as hundreds of millions of people seek sources of food, water, and a source of economic stability.

If the tradition of faculty freedom, as well as the long standing traditions of what constitutes approved scholarship within the various disciplines and professional schools,

continues to dominate –with only a minority of faculty addressing environmental issues—the question arises about whether presidents of colleges and universities, as well as provosts, deans, and department heads, have a responsibility to provide the conceptual leadership necessary in these times. But we have to be realistic about what should be expected of presidents, provosts, deans and department chairpersons. That is, the specialized backgrounds of the women and men who find themselves in administrative positions will make it difficult for them to acquire an in-depth knowledge of the cultural forces that are behind the double bind of promoting a lifestyle that is, in turn, contributing to further environmental degradation. Like most faculty, administrators are overworked, and in many instance they lack the conceptual background necessary for making the transition to a post-industrial way of thinking. These are major limitations.

Nevertheless, administrators at all levels of the university can provide leadership that does not depend upon being a deep thinker about the cultural roots of the ecological crises. Rather, leadership can be exercised by constantly reminding faculty of what should be the focus of their scholarship and teaching. In addition to administrators speaking out on what is now the most important issue facing humankind (and what could be more important than ecosystems unable to renew themselves in ways that support the present forms of life?), they can also initiate ways of holding faculty accountable without violating the faculty member's academic freedom.

There is now a similar shift in the thinking of a majority of the public, with the ecological crises becoming the new focus of concern. Presidents and other administrators need to take a leadership role that goes beyond that of approving of the retrofitting of the campus infrastructure with more energy efficient technologies. They need to speak out on the importance of making an ecologically sustainable future the main mission of the college or university. This will send a message to faculty who are focused on personal pursuits that may lead to publications that few will read, except for a few other faculty interested in an esoteric and ecologically irrelevant area of inquiry. It will also provide support for environmentally oriented faculty who lead a largely marginalized existence within many departments.

There are other features of exercising leadership that should be part of reframing the focus of academic interest, and that will contribute to a revitalization of scholarship and meaningful dialogue within and between departments. It would not be a violation of the faculty's academic freedom for administrators to suggest that departments set aside time when

all the members can attend a series of presentations by colleagues in the various environmental sciences on the changes taking place in the viability of natural systems—and how these changes are already affecting people's lives. Second, administrators from the president on down can ask for progress reports on various faculty initiatives, including both course revisions and scholarly research and publications, that address sustainability issues. Third, discretionary funds can be made available for faculty to attend conferences in the different disciplines where the main themes relate to environmental and cultural issues. Such funds could also be used to support faculty events that strengthen dialogue between faculty and members of the community who are engaged in sustaining the local cultural commons. Fourth, administrators can exercise leadership by reminding search committees that the highest priority of the college or university requires hiring new faculty who possess the scholarly background and the intellectual characteristics essential to collaborating with other members of the department on sustainability issues. This would not be a fundamental change from how administrators in the recent past advised search committees on the need to avoid gender and racial biases in the selection of new faculty. The president also needs to engage in a dialogue with the general public as well as powerful university supporters about what should be the main mission of the university, which is now quite different from what previous generations of graduates understood it to be.

The reframing of what faculty should use their academic freedom to address opens up areas of inquiry that are as complex and as little understood as what is involved in shifting from an individually-centered, industrial/consumer, and colonizing paradigm to a post industrial paradigm that is informed by the scale of environmental changes the planet is undergoing. There is also a need for a better understanding of the historical and diverse cultural traditions of sustaining the local cultural and environmental commons—and the many ways they have been enclosed by ideological and market forces in the past. As the diversity of the cultural commons, as well as the forms of enclosure, are as broad as human experience itself the need for scholarship and intellectual rigor will not be diminished—but it will be directed to providing new understandings that will affect the prospects of current and future lives.

Making this transition to a post industrial paradigm will be difficult for many faculty who have been socialized to think of themselves as self-directed rational individuals who have the right to determine what their intellectual priorities should be. Egos will also be involved, as will the background knowledge acquired from their own professors and from colleagues in

disciplines where emancipation from the intergenerational knowledge that enabled people to be less dependent upon the money economy has been become part of the narrative of Western progress. As readers will be quick to point out, college and university administrators have not proven especially skilled or prepared intellectually for providing the kind of leadership now required by the deepening ecological crisis. They also will need to learn from environmental scientists just how serious the environmental crises are, and they will need to learn about the cultural alternatives to the industrial/consumer dependent lifestyle that so many college and university administrators now take for granted. These are the steps that now need to be taken, but whether administrators and faculty will take them is entirely problematic. So far, the scientific evidence of changes occurring in the chemistry of the world's oceans, the melting of glaciers that will lead to shortages of water for millions of people, and the changes in habitats resulting from global warming seem to be taken seriously by only a minority of faculty—and not at all in colleges of education where the next generation of public school teachers are being "trained" to reproduce the cutting edge thinking and silences of what has now become, in light of the ecological crises, a reactionary paradigm.

The essays in this collection represent an effort to examine just one aspect of an exceedingly complex set of relationships that are at the center of the double bind that characterizes the globalization of the West's industrial consumer-dependent lifestyle during a period of rapid environmental degradation.   The focus in the following chapters is on the different ways that language, which is now represented in most classrooms from the early grades through graduate school as a conduit in a sender/receiver process of communication, carries forward many of environmentally destructive misconceptions of the past. Each chapter examines, within the context of different discourses, how the layered metaphorical nature of the language/thought connection continues to reinforce the same mindset that underlies a number of key characteristics of Western culture that still are not being addressed—even by environmental thinkers. These key characteristics include, among others, the Cartesian pattern of thinking that represents the environment as separate from the observer, the assumption that words such as democracy, individualism, progress, etc., have a universal meaning and thus morally justify what amounts to the linguistic colonization of other cultures, an indifference toward recognizing how words framed by the choice of analogies in the distant past continue to be the basis of today's thinking about how introduce reforms that reduce the destructive impact on natural systems, the

silences about the cultural commons that have been carried forward by Western philosophers and social theorists—silences that serve the interests of market liberals who want to rely upon the "invisible hand" (that supposedly operates in free markets) to determine the fate of individuals and cultures, the surprising widespread acceptance of an Orwellian political vocabulary that makes it difficult to recognize the traditions of civil liberties and intergenerational knowledge that are being undermined by powerful interest groups who are promoting economic globalization.

The chapters also provide an introduction to the nature and ecological importance of the cultural commons, as well as to the many ways they are being enclosed—that is, being integrated into a market economy at a time when we should be reducing people's dependence upon consumerism. Perhaps the most important discussion is on how to reframe the meaning of words, from the meanings (accepted analogies) that were taken for granted during the expansion of the creation and globalization of the industrial/consumer oriented culture to meanings framed by an ecological understanding of how individuals are nested in cultures and how cultures are nested in natural systems. Finally, there is a chapter that outlines the order in which the basic concepts need to be introduced if educators at all levels are to help in overcoming the double bind characteristics of how language is currently being misrepresented in educational settings. Introducing students to the cultural commons and the different forms of enclosure will be more easily understood if students first learn how the language they would otherwise take for granted is framed by the root metaphors that underlie the industrial/consumer oriented culture. Understanding cultures as ecologies is similar to understanding natural systems as ecologies. In the case of cultural ecologies the metaphorical nature of language largely determines, as Gregory Bateson pointed out in <u>Steps to an Ecology of Mind</u>, not only what will be ignored but also how the patterns that connect are interpreted. This process of learning to think within the conceptual frameworks of a post-industrial paradigm is always made difficult by the assumptions already taken for granted by students, especially when the assumptions are the basis of industrial/ consumer oriented culture to which they have become addicted. That many of these assumptions are still taken for granted by many faculty, including by environmental scientists who are often indifferent to the cultural roots of the ecological crises and to the importance of revitalizing the cultural commons, make the problem of transforming consciousness extremely difficult.

One of the insights that comes from reading Jared Diamond's book, <u>Collapse</u>, is that the cultures he studied collapsed because they were unable to align their belief system, values, and technologies in ways that took account of what the ecosystems they depended upon could sustain. In short, the failure to question their assumptions and taken for granted practices reflected the hubris that doomed them.

Chapter Two: Western Philosophers, Language, and the Titanic Mind-Set that has Put Us on a Collision Course with Environmental Limits

There are two questions that come to mind whenever I attempt to engage a university colleague in a discussion about the nature and importance of the cultural and environmental commons. The first is: Why is it so difficult for environmentalists and social reformers to recognize that the commons-oriented lifestyle that is ecologically sustainable is already being practiced in most communities around the world? The second question is: Given the mind-set that most public school teachers and university professors share with the men who designed and steered the Titanic into an iceberg, will they be able to change course when they finally become aware of the catastrophic consequences accompanying global warming? The first question should lead to recognizing that there are grounds for hope of achieving a sustainable future. Given the key elements of the Titanic mind-set, such as the hubris derived from long-held Western cultural myths, the answer to the second question is that it is unlikely that the hegemonic culture of the West will change course in time. This hubris will, in turn, lead to the collapse of other cultures as the ecosystems they depend upon begin to fail at an increasing rate.

The chief connection between the two questions has to do with the historical roots of the Titanic mind-set; particularly how earlier influential Western philosophers and political theorists influenced the distinction that Western universities now make between high and low status knowledge—a distinction that is reproduced by most public school teachers. The high status knowledge was, and continues to be, the basis of the industrial/scientific way of thinking that produced the Titanic as well the majority of today's technologies that are putting us on the collision course of exceeding what the Earth's natural systems can sustain. These early philosophers and political theorists set the intellectual and moral agenda through the language

they used, as well as by the silences required by their theories. The combination of their ideas and analogies became the dominant discourses among the West's industrially oriented elites and, for reasons that are difficult to explain, the dominant way of thinking of men and women who possess only a surface knowledge of the writings of these philosophers. And in many instances, the knowledge of the latter group is limited to words and phrases, taken out of historical context, that are used to justify world shaping economic and political policies. Words and phrases such as "freedom," "free-markets," "the invisible hand," "private property," "individualism," "progress," "natural resource," "survival of the fittest" (now replaced by "Darwinian fitness") and so on, can be traced back to the ethnocentric thinking of the West's most influential thinkers. The widespread silences in the thinking of today's public school teachers and university professors about the nature of traditions, the cultural and environmental commons, cultural differences in ways of knowing, and the complexity and importance of intergenerational knowledge (including the many ways in which it is renewed) can also be traced back to the silences and biases that have been part of the largely unrecognized legacy of Western philosophers and political theorists. While the process of how complex systems of thinking passed on in university classes becomes reduced to the guiding metaphors that politicians and members of the public rely upon cannot be fully explained, it is nevertheless important to begin the task of identifying the sources of the biases and silences that now are putting us on a collision course with the environment.

The micro-ecology of words, analogies, and interpretative frameworks that are the basis of today's discourses, always have a history. To be more specific, they have their origins in earlier culturally specific ways of thinking. We may not be able to explain the direct causal connections between the language/thought processes of earlier theorists, but there is one thing of which we can be certain. The conduit view of language promoted in our public schools and universities has conditioned the public, including today's intellectual elites as well as the Christian fundamentalist and NASCAR sub-cultures, to ignore how the thought patterns and values of the past continue to be the basis of how most people think. The conduit view of language sustains one of the myths that impedes the ability of most educators at all levels to recognize that the high-status forms of knowledge will replicate the fate of the Titanic –but on a vastly larger scale. In effect, the conduit view of language reinforces the naïve understanding that language is part of a sender/receiver process of communication. This myth, in turn, is

essential to sustaining other myths, including the idea of objective data and information—as though neither have their origins in human observation and interpretation. Other myths that the conduit view of language helps to obscure include the idea of the rational process as free of cultural influence, the autonomous nature of the individual (at least, that is the goal to be attained through education), that machines serve as the best model for understanding organic processes,

While it is impossible to establish a direct causal link between the micro-linguistic ecologies created by philosophers such as Plato and Descartes, who made a virtue of abstract and ethnocentric thinking, and the way their early vocabularies continue to be reproduced in today's Titanic mind-set, it is possible to provide an overview of how the silences and biases of these early theorists continue to marginalize an understanding of the nature and importance of the cultural and environmental commons. Perhaps, marginalize is not the best word here, as what the tradition of Western philosophers and political theorists accomplished was to help perpetuate a prejudice against the forms of knowledge and interdependent face-to-face relationships that exist largely outside of a money economy. Most important is that these prejudices stand in the way of recognizing the diversity of cultural patterns and relationships that hold the promise of a sustainable existence.

The suggestion that the ideas, values, and silences encoded in the language that has come down to us from influential philosophers of the distant past continue to influence how powerful groups think today may imply that I am making an argument for linguistic determinism. This is definitely not the case. As all languages are metaphorical in nature, with the process of analogic thinking being framed by the root metaphors (mythopoetic narratives and powerful evocative experiences that differ from culture to culture), and with image words that encode the key idea or model of thinking derived from the analogy that survived over others, language and the accompanying need for analogic thinking, are always changing. Some change faster than others. A form of linguistic determinism does occur when the language, and the conceptual templates it reproduces, are taken-for-granted. For example, when current thinkers take-for-granted that machines provide the best interpretative framework for understanding the mental/cultural processes of the brain, they are complicit in perpetuating the misconceptions encoded in the language handed down from the past—and in this case, the failure of Isaac Newton, Johannes Kepler, and the other founders of the scientific revolution to recognize the limitations of reducing all forms of life to what fits an mechanistic explanatory framework.

Complicity in reproducing the misconceptions of the past takes on added importance when we consider the ways in which the industrial/consumer-oriented culture continues to transform the intergenerational knowledge that sustains the cultural and environmental commons into new exploitable markets. Although the boundaries between the two cultures, the cultural commons and the industrial culture that requires reliance on a money economy, are not absolute, there are fundamental differences in their respective impacts on the self-renewing capacity of natural systems. Participating in both subcultures, including the ways in which they are interdependent, often involves taking-for-granted the values and ideas that are at the core of both cultures—even when these ideas and values are in direct conflict with each other. To make this point in a more concrete manner, most people participate in the intergenerational approaches to the preparation and sharing of a meal, while at other times frequenting the neighborhood fast-food outlet. Thinking about the differences in the experiences--such as in social relationships, development of skills, the adverse impact on the environment, and dependence upon a money economy is seldom given more than superficial attention. In the areas of the creative arts, healing practices, crafts, and so forth, there are similar differences between the largely non-monetized cultural commons and the monetized industrial/consumer dependent culture. Yet, the taken-for-granted state of consciousness results in moving between these two subcultures without an awareness of how one is a source of personal and community empowerment while the other leads to different forms of dependency. The tacit (taken-for-granted) nature of how most individuals experience everyday life is directly connected to the languaging processes of the culture into which they are born. If individuals are not aware that the language they rely upon in everyday activities influences what they will be aware of, what will be taken for granted, and what will exist as the culture's zones of silence, they will be less likely to recognize what is ecologically sustainable, and what is putting them on a collision course with environmental limits.

The commons and enclosure are two words that have their origins in the distant past, and which were and still are absent from the vocabularies of the West's most influential philosophers. While a few people understand the commons as encompassing the features of the natural environment that are shared outside of a money economy, the cultural commons are far more complex and even less understood. Unfortunately, this lack of understanding results in many scientists promoting the idea that science offers the best approach to understanding the

nature of the ecological crises, and that their many approaches to environmental restoration provide the best hope for a sustainable future. This way of thinking ignores that science can only provide half-way solutions, and that the revitalization of the cultural commons is equally important to reducing the human impact on natural systems. When we consider the many ways in which the diversity of the world's cultural commons are being integrated into the market economy that operates, with few exceptions, without any sense of environmental or moral limits we can see the problem of lacking the vocabulary necessary for making explicit and thus politically problematic the cultural patterns that are making people more dependent upon consumerism. Enclosure is one of these key words that brings to the level of awareness what other words, such as "exploit," "alienate" "profits,' "capitalism," and so forth, attempt to clarify. Because these other words too often are framed by an ideological orientation that assumes that all traditions must be overturned, they fail to clarify either the nature of the world's diverse cultural commons, and how they represent daily practices that have a smaller adverse ecological impact.

Enclosure is a word that should be understood as inseparable from the word commons. Life in the commons is always in danger of being enclosed; that is, being transformed in ways that create dependencies, exclusions, silences, exploitation, and environmentally destructive activities and relationships. Enclosure in more ancient times took the form of status systems, the privilege and rights of the nobility, armed struggle, and mythopoetic narratives. In its modern form, enclosure is achieved through private and corporate ownership, as well as by approaches to education that promote a form of individualism that lacks the skills and knowledge that are part of the intergenerational knowledge that sustains the cultural commons. Various modern ideologies that carry forward the Enlightenment prejudice toward traditions are also sources of enclosure. The combination of scientific, technological, and corporate interests that view the enclosure of the commons as leading to progress and greater economic opportunities is a more recent developments. What is important about the language necessary for making explicit both the complex nature of the commons and the equally complex processes of enclosure is that it is not part of the linguistic heritage (that is, the high-status vocabulary) that can be traced back to the thinking of Western philosophers and political theorists—at least those who are the mainstay of university courses where the possibility of acquiring a more ecologically sustainable language has been enclosed by the linguistic traditions that go back at least to Plato.

In order to establish a comparison between the language and conceptual biases that are part of the heritage of Western thinkers and the language necessary for naming the activities and relationships of the cultural commons it is first necessary to identify different aspects of the cultural commons. It is important to keep in mind that this partial list would be greatly expanded if we take into account of the nearly 6000 thousand languages still spoken today (with close to a third on the verge of extinction) and the knowledge of the local cultural and environmental commons these languages carried forward over countless generations. Naming different aspects of the cultural commons include: the words that identify the many processes and relationships related to the gathering, preparation, and sharing of food; the many words connected with the creative arts and their role in the narrative and ceremonies of the community; the many words connected with the skills, relationships, and patterns of moral reciprocity connected with built environments; the words that illuminate the many forms of mentoring and moral values passed on in these relationships; the words that clarify the nature of intergenerational responsibility—for renewing the wisdom and traditions (such as habeas corpus in our culture) in ways that do not diminish the prospects of future generations; the words that establish for members of the commons what constitutes moral responsibility toward the non-human forms of life as well as carry forward the skills and technologies that have a smaller disruptive impact on the self-renewing capacity of the natural systems of the bioregion.   In many of the indigenous cultures where survival is dependent upon intergenerational renewal both of the cultural and environmental commons there is also a special vocabulary that names the members of the community that have responsibilities, such as "keepers," and "elders." They also possess complex vocabularies for representing sacred practices and places.

The question that arises as the rate of global warming moves from scientific debate to the experiential level of devastating storms and radical changes in habitats is: What are the historical roots in the West of the language and the accompanying patterns of thinking that have contributed to marginalizing an awareness of the importance of the world's diverse cultural commons to a sustainable future? In order to avoid the impression that the question reflects a romanticized understanding of the cultural and environmental commons, it is important to acknowledge Jared Diamond's study of how the intergenerational knowledge of many cultures, in failing to take account of the special characteristics of the bioregions they depended upon, ended in collapse. It also needs to be kept in mind that what we regard today as oppressive

practices and relationships may also be part of a culture's commons that are intergenerationally renewed through narratives, ceremonies, and everyday discourse.

The question about the historical roots of marginalization is important for another reason. That is, as we begin to examine the silences and prejudices encoded in the vocabularies used by influential Western philosophers and political theorists it becomes easier to recognize how contemporary academics continue to perpetuate the same silences and prejudices that make it difficult for people to recognize the alternatives to a consumer dependent existence that still exist in communities across America. While it is impossible to prove that Western philosophers directly influenced different characteristics of the Titanic mind-set that is moving us full speed ahead toward ecological collapse, it is nevertheless useful to recognize parallels between the ideas of the West's supposed great thinkers to which generations of university students have been exposed and the widely taken-for-granted patterns of thinking that underlie today's environmentally destructive drive to integrate what remains of the world's diverse cultural and environmental commons into a money, profit-oriented economy.

The silences, assumptions, and prejudices that can be found in some of the West's most influential thinkers and in the Titanic mind-set include the following:

Marginalizing the importance of local context. The Titanic mind-set involves multiple ways in which local contexts are either entirely ignored or viewed as subject to being transformed by the introduction of rationally constructed systems. These systems may take the form of technologies such as dams; the introduction of synthetic chemicals and genetically modified seeds. They may also include political systems such as the recent efforts to introduce a Western style of democracy into tribal and Islamic cultures; economic models of development; rational approaches to problem solving that fail to take account of local knowledge; imposition of Western languages on non-Western cultures; and the acceptance of the loss of local knowledge about the sustainable characteristics of the bioregion.

Privileging abstract systems of representation over oral, face-to-face communication. Both philosophers and today's promoters of the Titanic mind-set value the following characteristics associated with literacy and other systems of abstract representation: rational thought as a culture-free activity of the autonomous individual; critical inquiry that leads to technical problem solving and to overturning cultural traditions; the acceptance of abstract ideas and theories that are assumed to have universal validity; the acceptance that what cannot be digitized and

communicated through a computer has no importance; giving highest priority to reducing experience to what can be quantified; viewing oral traditions as inferior to literacy and as the expression of cultural backwardness.

Viewing the individual as an autonomous thinker and source of moral judgments. This Western view of individualism includes: privileging the uniqueness and authority of the individual's perspective on an external world; the individual as the source of rational ideas and values; the idea that ownership of property and reducing the environment to an exploitable resource is an individual's inalienable right; an absolute sense of entitlement to making judgments regardless of whether they are based on credible knowledge; a strong tendency to place the interests of the individual over the interests of the community and the self-renewal characteristics of the environment; a disregard for recognizing and for improving upon the legacy of the cultural commons that sustains daily life—including the civil liberties that are now being threatened by the men and women who share a common ideology that promotes profits over all else.

Change is an inherently progressive force that requires the further enclosure of the cultural commons. The chief characteristics include: an uncritical acceptance of new ideas and technologies--except when they stand in the way of newer ideas and technologies, expert systems as improvement over local knowledge that is seen as too slow to change; an indifference to the importance of the cultural and environmental commons that are being lost through the introduction of market-oriented technologies; a missionary zeal for imposing the Western understanding of progress on other cultures; promoting the Western idea that students' should construct their own knowledge by relying upon the same critical inquiry that also underlies technological innovations that too often fail to take account of the local cultural context—including traditions of self-sufficiency.

Ethnocentrism as a core feature of educational systems based on the assumptions they are more "evolved" than non-Western approaches to education. This feature of the Titanic mind-set and of influential Western philosophers includes the following assumptions: students should be exposed only to the ideas, technologies, values, and achievements of the most developed cultures; the Social Darwinian assumption underlying this prejudice can be seen in how even some students taking anthropology courses often argue that "we cannot go back" as though cultures can be identified as being located on a linear path where development leads from a

primitive beginning to different stages in the process of cultural evolution; the combination of ethnocentrism and Social Darwinism that underlies the privileging of abstract knowledge systems over face-to-face intergenerational traditions of knowledge—such as privileging literacy over orality and, now, computer mediated knowledge over mentoring and the wisdom of elders. **What can be monetized is more important than non-monetized activities and relationships.** This characteristic of the Titanic mind-set values turning what remains of the cultural and environmental commons into new commodities and new market opportunities; it holds that there are no moral limits on what can be monetized and integrated into the industrial system of production and consumption; it equates progress with gains in consumerism and going further in debt as individuals and as a nation; and it promotes greater dependence upon an industrial/consumer dependent existence by omitting from the educational process a knowledge of the cultural commons that provides alternatives to consumerism.

Not all of the above characteristics are to be rejected. There are circumstances where different ways of understanding individualism, the use of abstract systems of representations—including print, the efforts to achieve progress over previously held traditions and practices, and the use of a money economy, are highly useful. On the other hand, ethnocentrism and the failure to take local contexts into account can never be justified. The chief problem with the characteristics of the Titanic mind-set, to which the history of Western thinkers has contributed, is the lack of balance and thus an awareness of the complexity of the world's diverse cultural and environmental commons. Until recently the awareness of the interdependencies of individuals, cultures, and the sustainable characteristics of ecosystems has been largely absent in the thinking of Western philosophers and political theorists. The silences, prejudices, and culturally uninformed approaches to the nature of knowledge, as well as what leads to progress and the good society, can be partly explained as the philosophers' inability to recognize how the cultural assumptions they took-for-granted influenced what they proposed as overcoming the limitations of their times. As we will see in the following discussion of how philosophers and political theorists influenced what is discussed in today's classrooms, some of these theorists introduced radical departures in how to think about the source of knowledge, the nature of individualism, the right to private property and to exploiting the environment for profit, and the qualities of those who should govern others, and so forth. Common to all of the radical ideas that were introduced, and which current professors seem largely unaware of, include the

ethnocentrism, the silences about the connections between the cultural and environmental commons, and living a sustainable existence—and the silence about how many indigenous cultures had already learned to live within the sustainable limits of their bioregions.

The identification of ideas central to the Titanic mind-set, as well as the possible origins of these ideas, should not lead to the conclusion that the ultimate responsibility for putting our culture on a collision course with the limits of the Earth's natural systems lies with the Western philosophers and political theorists. There are too many other influences on the legacy of Western philosophy handed down over the generations that make it impossible to assign final responsibility. Certainly, the failure of successive generations of modern professors continue to be culpable in reinforcing a mind-set that fails to recognize that the ecological crises reflects the long standing crisis in the Western culture's ethnocentric and anthropocentric way of thinking. Another problem that now needs to be taken into account, and it has to do with how today's political discourse continues to be influenced by the use of slogans borrowed from past philosophers and political theorists. Slogans about the efficacy of "free markets," "democracy," " economic development," " individualism," and "science" as the only self-correcting approach to knowledge, as the late Carl Sagan put it, need to be understood as the age-old problem in the West of context-free thinking. As this pattern of thinking is leading us down a politically and environmentally slippery slope, one would expect that academics at all levels would begin to address it. But like the current misuse of our political language by graduates of schools of journalism, which journalism professors continue to ignore, the problem continues. Labeling market liberals as conservatives must surely confuse people about what is essential to conserve, such as species and habitats and our civil liberties—among others. Even for the more socially justice oriented segment of society, there is a widespread reluctance to acknowledge what needs to be conserved. They prefer to use the political vocabulary of liberalism, and to ignore that the mantra of the scientific/industrial culture is "progress"—which is what has been used to give moral legitimacy to various expressions of liberalism.

Plato's influence on the formation of the Titanic mind-set can actually be documented by comparing the ideas of Leo Strauss with key ideas presented in <u>The Republic</u>. These ideas, which Strauss has passed on to many of the current proponents of President George W. Bush's domestic and foreign policies—along with the idea of relying upon the fundamentalist Christians as a primary base of support, include the following: that a small elite group of thinkers capable of

understanding and being guided by universal Truths should be the governing class; that this governing elite should use lies as a political strategy for ensuring that the lower classes perform the function they are best suited for; that the ruling elite is not accountable to the people they govern; and given that only the ruling elite possesses the capacity of discerning the eternal Truths, the other classes should be guided by the myths of religion that will hold in check any idea that the members of the lower class should seek to be self-governing –an illusion that both Plato and Strauss viewed as leading to the tyranny of the unqualified.   Strauss's reading of Plato has had a direct influence on the thinking of President George W, Bush, his advisors, and on the thinking of several members of the Supreme Court. While it is possible to see evidence of Plato's ideas being put into practice today, the real responsibility for the disastrous consequences of trying to implement them must be assigned to Strauss, his many followers in Bush's administration, and in the market-liberal think tanks that are incorrectly labeled as conservative.

The features of Plato's thinking that are less easily judged as having a direct influence on today's world include his arguments that pure reason is the only approach to knowledge, that poetry and narratives undermine the rational process by fostering human emotions and loyalties to local traditions, and that the characteristics of justice transcend place, time, and the diversity of cultures—and thus are not subject to local democracy. Yet it is these aspects of Plato's thinking that are such a prominent characteristic of the Titanic mind-set that is on a collision course with extinction. To restate Plato's core ideas in more contemporary terms, by arguing that knowledge cannot be derived from the constantly changing nature of cultural experience he gives support to the current idea that abstract knowledge is a more reliable guide to living in a culturally diverse world and environmentally changing world. Furthermore, his arguments about what he regarded as the mis-educational nature of poetry and narratives have now become the conventional wisdom of many of today's educational elites who regard oral traditions and thus oral-based cultures as backward and in need of modern development—which is the code phrase for acquiring the ability to rely upon abstract thinking.

Another current way of thinking can be traced back to the importance that Plato gave to the idea that the individual has a psyche--an idea that may have had its origins in the thinking of Socrates. The Homeric mind, which Plato opposed, was shaped through identification with the exemplary figures represented in the epic narratives. These narratives also served as the storehouse of what was expected of a citizen, of the nature and proper use of technologies, and of

the moral imperatives of the group. The Homeric mind did not reinforce the idea that individuals should have their own convictions and be self-guiding through the exercise of rational thought. Plato's introduction of the idea of "sheer thinking" required a redefinition of the self where memory and identification with the exemplary acts of Homeric culture give way to the idea of the autonomy of individual thought (a capacity that only a select few possessed). Rational thought as sheer thinking thus required the idea of an autonomous agent—that is, a knowing subject and the idea of an external world that is separate from the knower. Plato solved this problem by claiming that only the guardians possessed the capacity to "contemplate the realities themselves as they are forever in the same unchanging state." This idea of unchanging ideas would give way in modern times to the relativity of individual interpretation. However, the idea that there is an inner space where thinking occurs still survives, and is further buttressed by the Judeo-Christian idea of an individual soul that she/he is accountable for.

If the importance of abstract thinking, as well as the separation of the knower from the known, needed to be reinforced after centuries of the Scholastic philosopher's focus on the nature and moral implications of a God-centered world, it was Rene Descartes who came to the rescue. Again, the question arises as to whether Descartes anticipated or was adopted by generations of thinkers who shared the same legacy of thinking that can now be recognized as the Titanic mind-set. He is most often associated with the dualism of mind and matter which we can now recognize as a restatement of an assumption that can be traced back to Plato.

This seventeenth century mathematician and philosopher was adamant in holding that nothing could be learned from the past—including the philosophers who preceded him. He further rejected all cultural knowledge systems that did not fit his mechanistic model of the universe. This was not made explicit in his writings as he, like most recent philosophers, simply ignored the knowledge systems of other cultures. His argument that the fundamental characteristics of a machine, which he extended to both organic and non-organic entities, excluded a concern with moral values except those found in the religion of his day. This meant that the anthropocentrism that was a core feature of the dominant religion excluded any possibility of a land ethic that would guide people's lives, which had already been achieved by many indigenous cultures such as the Western Apache and the Quechua.

Aside from his certainty of the existence of God, the only other certainty he acknowledged was summed up in his famous phrase "cogito, ergo sum" (I think, therefore I

am). By rejecting previous knowledge and by positing that a deductive form of rationalism was the only reliable approach to knowledge, Descartes added to the twin misconceptions that the individual is an autonomous thinker (except for the influence of God), and that individuals are universally the same. Descartes anticipated (influenced?) another characteristic of the Titanic mind-set, which is that the deductive approach to rationality yields knowledge that is universally valid. That is, Descartes assumed that if all individuals relied upon the same approach to rationality they would arrive at the same conclusions. It is important to note, however, that his deductive approach differs radically from the experimental approach of modern science.

While Plato's ideas were part of the tradition that Descartes rejected, he nevertheless reinforced many of the ways of thinking that can be found in Plato's theory of Ideas-- and thus what constitutes justice. The shared similarities between Plato and Descartes can also be seen as central to the Titanic mind-set of today. They include the following assumptions and silences: that when individuals the world over share the same approach to the rational process they will arrive at the same conclusions; that human existence, when guided by rational thought, will continue to progress regardless of the degraded condition of the environment; that the mythopoetic narratives that sustain different cultural ways of knowing should be abandoned in favor of the one-true approach to knowledge discovered by Western philosophers. It is interesting to note that E. O. Wilson makes the same argument in <u>Consilience: The Unity of Knowledge</u> (1998) when he claims that the world's religions represent an earlier survival strategy, and should now be replaced by the theory of evolution as the guiding metanarrative—and that scientists should determine which cultural beliefs and practices will meet the test of natural selection. Plato came the closest to recognizing the forms of knowledge that can be identified as part of the cultural commons. While he recognized the knowledge and manual skill of the craftsperson, he also held that it was inferior and thus lacking in wisdom. The silence shared by Plato, Descartes, and the Titanic mind-set also can be seen in how their hubris led them to ignore the idea of self-limitation for the sake of future generations.

Just as few contemporary professors of philosophy are likely to bring to the attention of students the ethnocentrism and anthropocentrism in the thinking of Plato and Descartes, students are likely to encounter the same silences when they are introduced to the core ideas of John Locke. These silences, which are based on cultural prejudices that most classical and contemporary philosophers failed to examine, were given a modern form of legitimation by the

ideas of John Locke. Although most of today's politicians and even citizens will not have read and discussed Locke's Essay on Human Understanding, as well as his Two Treaties on Government, they nevertheless take-for-granted a simplified interpretation of several of Locke's key ideas. This is one of the mysteries of the Titanic mind-set; namely, how ideas and assumptions are intergenerationally passed along when people are unaware of their source—and of the historical/political circumstances to which the author was responding.

Locke was writing during a transition from royal absolutism to the Glorious Revolution that established a constitutional monarchy. This period was also characterized by advances in science and a growing awareness of human freedom. What is particularly relevant to understanding how the ideas of Locke contributed to accelerating the enclosure of the commons, as well as how he further strengthened the idea that traditions (that is, intergenerational knowledge) are irrelevant if not a misleading source of knowledge, are his ideas about the nature and source of private property, the empirical basis of ideas, and a view of language that supported the misconception of language as a sender/receiver form of communication. Identifying the nature of the person, including the rights they possess as individuals, was a primary concern of Locke. In addition to arguing that only individuals have rights (including the right to overturn the government when it becomes too oppressive), he went on to argue that the labor of the individual is the basis of private property. He also held that one of the primary purposes of government is to protect the individual's property. He even articulated what has become a truism of today's market liberals when he wrote that the state "cannot take from any man his property without his consent." The individual's absolute sovereignty in the use and abuse of property is now a keystone belief of the Titanic mind-set.

Locke's other contributions to this mind-set include his argument that the individual's direct experience is the source of ideas—which he divided into simple and complex ideas. His argument that communication is a process of using words to convey one's thoughts to others has contributed to the still-held misconception of the role of language as a sender/receiver process of communication. In effect, this view of language as a conduit further hides the basic reality that language, as a complex mix of historical and current analogic thinking, frames thinking in accordance with the prevailing root metaphors. The conduit view of language leads people, including our elite thinkers, to ignore that words have a history, and that the taken-for- granted root metaphors (interpretative frameworks) frame the process of thinking in culturally specific

ways. This misconception about the nature of language must be taken into account when considering why the ethnocentrism that has been such a prominent characteristic of Western philosophers has continued to be such a dominant characteristic of today's university educated politicians and citizens.

Just as the Titanic mind-set gives special standing to individual freedom, the sanctity of private property, and the progressive nature of rational thought, it also gives special standing to key ideas of Adam Smith that have become today's political clichés. As a pale echo of Plato's timeless Ideas, these clichés have also been given the status of timeless and universal truths. Unfortunately, they further marginalize the possibility of recognizing the non-monetized relationships and activities that are central to the world's diverse cultural commons. In short the extrapolations from Smith's writings have been turned into universal truths that continue the tradition of ethnocentric and anthropocentric thinking that goes back to Plato and beyond.

Adam Smith's two major works, The Wealth of Nations and The Theory of Moral Sentiments are complex and, given the nearly half million words it took to lay out his economic theory, are too dense to hold the attention of most readers. Yet a few words and phrases from this lengthy tome have survived in a way that has altered modern consciousness and now serve to justify the process of economic globalization that threatens what remains of the world's cultural and environmental commons. The power of these words and phrases, "free trade," "laissez-faire," "the invisible hand," to "truck, barter, and trade," serve today to give further legitimacy to the ideas that the sanctity of private property, free competition, and the unrelenting pursuit of self-interest contribute to the overall well-being of society. That Smith's economic theory has been taken out of its historical context of how the local economy of Scotland was being limited by the mercantile policies of the king of England is only part of the story of how current misconceptions underlie today's taken-for-granted truths.

While Smith's idea that the prosperity of all is advanced as individuals pursue their individual interests has become a truism for today's market liberal politicians, the selective memory of today's university educated economists and politicians can be seen in how the other half of Smith's theory has been ignored. In The Theory of Moral Sentiments, Smith introduced a more complex view of human nature, one that represents human life as responsive to social needs other than the freedom to pursue wealth at the cost of everything else. For Smith, the innate need of humans that serves as a check on unrestrained competition in the market place is

the desire to take the responses of others into account. That is, to be sensitive to the impact of one's behavior on others. What Smith viewed as an innate human characteristic was summed up in the following way:

> Nature, when she formed man for society, endowed him with an original desire to please, and an original aversion to offend his brethren…She rendered their approbation most flattering and most agreeable to him for their own sake; and their disapprobation most mortifying and most offensive (p. 199).

This insight, as ethnocentric as it is, might have provided a way of recognizing the importance of mutual support and moral reciprocity that are core features of most cultural commons. It would have also provided an awareness that Smith understood the moral limits of the individual's pursuit of self-interest and an unrestrained form of capitalism. Unfortunately, this part of Smith's legacy has been largely overlooked with the result that it has been reduced to a series of slogans that are now used to justify the further exploitation of the cultural and environmental commons.

Not only has Smith's legacy become frozen in the slogans now used to justify economic globalization, it has, at the same time, become the linchpin in the market liberal ideology that is accelerating the rate of environmental degradation. A comparison between the values of the commons that meets Gregory Bateson's definition of a healthy cultural and environmental ecology and the values underlying the reductionist, out-of-context slogans derived from a partial reading of Smith's writings on free markets brings out the following. A sustainable cultural commons, as Bateson understood it, is governed by moral values that exclude the exploitation and marginalization of any of its members. Thus, it is characterized by cooperation, mutually supportive and largely non-monetized relationships and activities, renewing of intergenerational knowledge and skills, mutual trust, mentoring relationships, face-to-face accountability, use of local materials, markets that are local and that meet community needs, an awareness of environmental limits, and the need to conserve proven traditions that will contribute to the well-being of future generations. As many academics have only experienced the false plenitude of the market system, with its ideology of possessive individualism, they are unlikely to recognize the qualities that Bateson associates with the cultural commons that still exist among different groups within the community. The deeply engrained ethnocentrism that was part of their own education will lead most of them to reject the suggestion that there are cultures in the world

where the cultural and environmental commons are the dominant feature, with markets being relegated to a particular location and on specific days of the week.

By way of contrast, the daily practices given legitimacy by the slogans derived from Smith's writings are driven by the life-long individual quest for material wealth, competition at all levels of social life, an emphasis on progress that fails to take account of what is being lost or the dangers that lie ahead, the need to expand markets and profits regardless of the adverse impact on local communities, a view of the environment and other people as exploitable resources, and the continual quest for new technologies that will increase efficiencies and profits. As the deep cultural assumptions that underlie the free-market system of unlimited production, consumption and exploitation are reinforced at all levels of the educational system, as well as by the media, shopping malls, and the ever-present displays of personal wealth, the relationships and values that sustain the local cultural commons recede more into the background of community life. For the youth already addicted to acquiring the latest technology and consumer fad, and the middle age people still attempting to climb higher on the consumer pyramid, the local cultural commons are largely invisible—but often not to the older members of the community who seek the forms of supportive relationships and skill development missing in their years of working within the market-dominated system.

Just as key ideas of Plato, Descartes, Locke, and Smith are part of today's taken-for-granted Titanic mentality, several of John Stuart Mill's ideas have also attained special status as unquestioned truths. And again, like the others, while his ideas were articulated as a response to the circumstances of his time—which was governmental abuse, they have been taken out of context and now stand as universal "Truths" that all cultures should adopt in their march to becoming modern and economically developed. Mill's famous book, On Liberty (1859), was an eloquent defense of the importance of free speech and intellectual freedom, as well as a carefully crafted argument against governments that attempt to silence ideas viewed as threatening their power. As he wrote in On Liberty, "if all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind."

Mill understood that free expression is essential in a world where there are no absolute truths. For him, free expression, critical inquiry, and even misleading ideas are all part of the process of achieving a better understanding. As he put it, the first duty of the thinker "is to

follow his intellect to whatever conclusion it may lead." This dictum, which has been given greater authority by the largely unquestioned assumption that change is inherently progressive in nature, has been translated by today's market and social justice liberals to mean that freedom of speech and critical inquiry should lead to change—with the market liberals equating change with new technologies and markets. That these qualities of mind should also lead to clarifying why different traditions need to be conserved has largely been overlooked—or ridiculed as the expression of a reactionary way of thinking. The way in which Mill's defense of free inquiry has been framed by the assumption that it should lead to change rather than in warranted cases to conserving the intergenerational knowledge (even wisdom) of the community is only one of the reasons that his ideas need to be considered as having the potential of undermining the traditions that sustain the commons.   From the perspective of people who understand the cultural and environmental commons as essential to their cultural identity and traditions of relative self-sufficiency (and thus as sites of resistance to the unrelenting spread of market forces) Mill's defense of free speech could also be used to challenge the agenda of the market liberals who seek to replace the commons with consumer goods and services. Unfortunately, the failure of most public school teachers and university professors to be aware of the commons, as well as their largely uninformed prejudices that lead to viewing the conserving of traditions as reactionary in nature, has led to interpreting Mill's defense freedom of inquiry as a the rallying cry for questioning everything, and for living as though history has no influence—as two prominent advocates of educational reform recently put it.

There is another aspect of Mill's legacy that carries forward the ethnocentrism found in the thinking of Plato, Descartes, Locke, and Smith—and that still pervades most contemporary courses in philosophy, economics and political theory. Mill's arguments for freedom of inquiry, like the arguments of the other philosophers discussed here, failed to take account of the many approaches to renewing the knowledge, skills, and patterns of mutual support that can be found in different cultures—including the culture that Mill was embedded in and largely took for granted. His ethnocentrism can also be seen in his argument that the individual is the source of ideas, and that individuals should follow where critical reflection leads—even when critical reflection is based on the wrong assumptions. That is, Mill's defense of freedom of inquiry, which is undeniably important in certain contexts, also leads to representing individuals as autonomous and self-creating. This is a core idea of today's market liberals who understand that

individual autonomy is a virtue in that it means that the individual, in lacking the skills and membership in the mutual support systems of the local commons, will be dependent upon consumerism to meet needs that range from food, health care, entertainment, sports, built environments, and group identity.

What Mill did not understand, and what is still not understood by people today who have been indoctrinated by the media and by educators who share the same cultural assumptions that underlie the myth of unending progress, is that the idea of self-creating individuals is part of the West's mythic thinking. The idea of autonomy, at least for individuals who meet the conditions specific to what each philosopher took to be the nature and source of knowledge, was not based on an awareness of how the mythopoetic narratives of cultures are encoded in the interpretative frameworks that influence the processes of analogic thinking, and in the image metaphors that reflect which analogies and their underling root metaphors prevailed over competing analogies. That is, Mill along with the other philosophers did not understand that when individuals are born into a language community their patterns of thinking will be heavily influenced by the assumptions carried forward in the image metaphors (words such as data, freedom, tradition, individualism, and so forth) and by the taken-for-granted interpretative frameworks that are shared by other members. If the reader doubts this claim, then she/he should consider the connections between the mythopoetic narratives in the Book of Genesis and how the language/thought patterns of today's supposedly autonomous individuals reproduced the myths of patriarchy and a human-centered universe that were taken-for-granted for several thousand years.

In addition to Mill's failure to recognize that the languaging systems of the culture that individuals are born into influences their patterns of thinking, body language, and ways of reproducing the material culture, he shared the ignorance of his day about the life forming characteristics of the natural environment. His theory of the individual's need for free inquiry reflected the silences and prejudices of his era. To reproduce those silences and prejudices today, as though they represent unqualified truths about the human condition and possibilities, puts us on a collision course with other cultures that have a tradition of adapting their cultural practices to what can be sustained by the bioregion they depend upon. His ideas, as they are promoted today, also contribute to the sense of hubris that characterizes the Titanic mind-set. What his approach to knowledge demonstrates, and which can be seen in the thinking of Plato

and the other philosophers discussed here, is that he was unable to recognize the silences, prejudices, and taken-for-granted assumptions of his era—most of which centered on the inability to recognize the everyday patterns of the culture they lived in and that other cultures had different approaches to knowledge that should not have been interpreted as existing at a more primitive level of development.

Another characteristic of the Titanic mind-set can be traced back to the thinking of Herbert Spencer who combined key ideas from the writings of Locke and Smith with the emerging theory of evolution—thus, giving his arguments for a laissez-faire economy, and a survival of the fittest social ethic the legitimacy of science. This mid-nineteenth century advocate of the liberal agenda for restricting government in the areas of social welfare and business regulation, actually coined the phrase "survival of the fittest" that Charles Darwin later adopted. Spencer also carried forward the philosophic tradition of ethnocentric and anthropocentric thinking, as well as its silences about the nature and importance of the world's diverse cultural commons. To his readers, he provided scientific legitimation to a prejudice long held by Western thinkers that cultures represent different stages of development, starting with pagan and illiterate cultures and moving to the most advanced culture that is Christian, literate, and in possession of experimental science and technology. For Spencer the industrial system represented the most advanced expression of social evolution, and it could only retain its adaptive edge by not interfering in the process of natural selection. As he put it, "pervading all nature we must see at work a stern discipline, which is a little cruel that it may be very kind." To make his point more directly, society benefits as a whole from the elimination of the unfit—those who are not as competitive, who are sick or physically limited, and those who start life with few opportunities.

Spencer's ideas have not disappeared from today's political discourse. And his Social Darwinism has not disappeared has not disappeared from today's scientific discourse. It is now carried forward by the current efforts of E. O. Wilson, Richard Dawkins, and Daniel Dennett, among others, to explain how the cultural memes (which correspond to the genes of organisms) are subject to the same "stern discipline" of natural selection. Spencer's Social Darwinism also underlies the current policies of market liberals who created the World Trade Organization, and have as the centerpiece of their political agenda the transference of wealth to those who have already succeeded in accumulating power and wealth, the privatizing of poverty and social

disadvantages, limiting the role of government to promoting the further expansion of a free-market system, and expanding the role of the military in support of economic globalization.

The integration of classical liberal ideas with the theory of evolution also carried forward the tradition of thinking that can be traced back at least to Plato: that is, the idea that rationally based theory constituted by men who were ignorant of different cultural ways of knowing, as well as ignorant of how the cultural and environmental commons represented alternatives to the environmentally destructive industrial system of production, should be, in the name of progress and development, imposed on the rest of the world. There is no more extreme expression of hubris than this. The Titanic was taken to be a prideful symbol of the correctness of this hubris. It represented the most advanced state of technology, the highest expression of luxury, and the ability of the industrial culture to dominate nature.

In assessing whether the traditions of philosophic thinking have influenced our current inability to address the cultural roots of the ecological crises, it is necessary to point out again that it is impossible to establish direct causal connections. As pointed out earlier, politicians and supposedly educated people continue to use phrases borrowed from the writings of philosophers they have not read in depth—or at all. And their way of thinking carries forward the same prejudice and silences. A deep knowledge of culture, as well as the ways of knowing and forms of ecological citizenship of other cultures, continue to be missing in the education of most university graduates. This may account for why such a large segment of Americans support the market liberal policies even when the policies undermine their community's traditions of self reliance. This collective myopia may also account for why nearly half of American voters fail to consider that the market liberal agenda of economic colonization is one of the causes for the armed resistance that is now being directed at the West.

The questions raised at the beginning need to be given more careful attention. If our educational institutions, including the trend setting elite universities, continue to reproduce the same silences, prejudices, and culturally uninformed patterns of thinking that can be found in the writings of Plato, Descartes, and the rest of the philosophers discussed here, then there is little likelihood that we will be able to change course in time to avert the collapse of sustainable ecosystems that many in the Third World are currently encountering. The issue is not whether students currently encounter philosophers and political theorists who actually accept the ideas of past philosophers as valid (though there are more than just the example of the followers of Leo

Strauss). Rather, it's a matter of being introduced to the Western traditions of thinking by professors who are unaware of the silences and culturally uninformed prejudices that were passed on by their own mentors who were unaware of environmental limits and the ecological importance of the cultural and environmental commons. This process of carrying forward the misconceptions of the past is not a matter of speculation. As pointed out earlier, misconceptions that can be traced back to the Book of Genesis about a patriarchal and anthropocentric world have only recently been challenged. And if we read Richard Rorty, John Dewey (who is being revived as an environmental philosopher even though the evidence points the other way), and if we consider the British tradition of analytic philosophy, we find the same silences found in the thinking of earlier Western philosophers as well as their culturally uninformed ways of understanding. Even these more current philosophers represented their ideas as having universal validity. And if we look at what students are learning in their political theory classes (if they should take one), we will find that they are unlikely to encounter a discussion of how our two most widely used political terms, liberal and conservative, are now used in an Orwellian fashion. Nor are they likely to learn that the use of liberal should take account of two distinct political agendas that are related at the level of deep cultural assumptions; with the market liberals being promoters of the classical liberal idea of free markets and a reduced role for government—and the social justice liberals concerned about issues of equal economic, political, and educational opportunity. Students are also not likely to learn how the current misuse of conservative and conservatism as the label for advocates of free markets and economic globalization, fails to take account of how environmentalists and people working to revitalize the cultural commons as alternatives to a consumer dependent existence are the genuine conservatives. They are also unlikely to learn that this form of community and intergenerationally-centered conservatism was first articulated by Edmund Burke and more recently by Wendell Berry. The failure of universities can be seen in the large percentage of university graduates who are willing to see their traditions of civil liberties, including habeas corpus, disappear in response to the politics of fear and outright demagoguery wrapped in the American flag.

The challenge is in knowing where to begin changing the ecological destructive course that our culture is on—which means, in part, determining where to begin persuading faculty across the disciplines that global warming is occurring and the chemistry of the oceans is changing—and that just these two fundamental changes in the environment are going to increase

poverty, civil strife, and perhaps even the prospects of a fascist government that will go to any length to preserve the right of corporations to continue to exploit the environment and to further enclose the diversity of the world's cultural commons. There are promising proposals for educational reforms that are being discussed in different countries, but unfortunately most faculty are too busy with their individually oriented research and still too captive of the misconceptions acquired in their own graduate studies, to consider whether the content of their courses and research is part of the problem or part of the solution.

Chapter Three: The Linguistic Colonization of the Present by Past Thinkers Who Were Unaware of Environmental Limits

National organizations in many Western countries are now beginning to focus attention on how to encourage faculty in the various disciplines to introduce sustainability issues into their courses. This is a far more difficult challenge than retrofitting university campuses with more energy efficient technologies and waste recovery programs. Unfortunately, the efforts to initiate curriculum reforms in academic disciplines that traditionally have focused on human behaviors as though these behaviors were entirely free of environmental influences or impacts will be exceedingly difficult. Another reason that the needed curricular reforms may fall short of enabling students to understand the deep cultural roots of the ecological crises is that the tradition of double bind thinking that is unrecognized in most academic fields of inquiry will prevent them from graduating with a knowledge of existing alternatives to an individually-centered consumer dependent lifestyle—and from learning to think within in an ecologically and culturally informed paradigm.

Before explaining the nature of the conceptual double bind that academics are caught in, it is necessary to acknowledge that a wide range of scientists are already studying the changes in the environment, and an increasing number (though still a distinct minority) of faculty in the non-scientific disciplines are introducing environmental issues into their courses by having students read environmental writers that range from Vandana Shiva, Val Plumwood, to Wendell Berry and Rachel Carson. While the latter is a long overdue development, it still falls far short of addressing the problem of double bind

thinking that underlies most university courses—even in the sciences. Succinctly stated, double bind thinking involves the linguistic domination of the present by the past. Albert Einstein stated the problem of double bind thinking in more straightforward terms when he said that we cannot rely upon the same mindset to correct the problems that were created by this mindset. In effect, further progress based on the taken for granted assumptions underlying this mind set, which provided the conceptual direction and moral legitimacy to the Industrial Revolution that is now in its digital phase of globalization, will simply accelerate the destruction of the natural systems that current forms of life depend upon.

What is the nature of double bind thinking and why are so many academics unable to recognize how it is being reinforced in their classes? The answers to these two questions can be found in one of the conceptual cornerstones of academic culture—and, by extension, in the thinking of journalists, teachers, and others who reinforce the mindset that is putting us on the slippery slope leading toward an ecological catastrophe. Academic inquiry, publication, and teaching are based on the assumption that language is a conduit in a sender/receiver process of communication. This assumption, or what I prefer to call a minor myth, has huge ecological and cultural consequences. It is necessary to the support of three other minor myths: namely that the individual is an autonomous thinker (at least has the potential to be), that there is such a thing as objective data and information, and that the rational process transcends all forms of cultural influence. The conduit view of language, which also is reinforced in print based modes of communication and storage (which includes computer mediated thinking and communication) leads to thinking of words as having a universal and timeless meaning that transcends cultures. It also contributes to ignoring that abstract words marginalize awareness of local contexts, tacit understandings, and embodied/culturally mediated experiences.

In effect, the conduit view of language supports the long history of the linguistic and economic colonization of non-Western cultures. The conduit view of language also contributes to another aspect of double bind thinking that will continue to overwhelm the benefit of reading environmental writers, and the development of technologies that have a smaller ecological footprint. It is important, therefore, to focus on the dynamics of how

past ways of thinking are unconsciously being reproduced in courses that are being greened. Gregory Bateson explains double bind thinking as rooted in the inability to recognize that words have a history, and that they carry forward the misconceptions of earlier thinkers who were unaware of environmental limits. Basically, double bind thinking occurs when academics unconsciously reproduce in their own thinking the cultural assumptions taken for granted by earlier thinkers who were successful in framing the meaning of words with the analogies that made sense in their era. Because the times and issues that these earlier thinkers were addressing are profoundly different from our politically and ecologically problematic times, continuing to base current thinking on these earlier analogs has the effect of reproducing the earlier forms of cultural intelligence—or unintelligence.

An early example of the roots of double bind thinking that most Western philosophers continue to reproduce even today can be seen in the privileged status that Plato gave to abstract thinking. Plato was concerned about the nature of justice, and thus banned the poets, storytellers, and all forms of knowledge based on embodied/culturally mediated experiences as impediments to a rationally organized Republic. His choice of analogs for representing the nature of the rational process that apprehends the eternal Forms or Ideas and his choice of analogs for representing the fleeting nature of opinion and circumstantial knowledge, established a tradition of giving abstract rational thought a privileged status that marginalized awareness of the diversity of the cultural commons, the environmentally destructive cultural practices that were evident even in his day, and the different cultural ways of knowing. Western philosophers reproduced Plato's penchant for abstract and culturally uninformed theory by turning abstract ideas into complex theories about the nature of knowledge, individualism, freedom, the origins of property, the mechanistic nature of the universe, and so forth. This has become part of the legacy of earlier thinkers such as Kepler, Descartes, Locke, Smith, Bentham, John Stuart Mill, and even John Dewey who argued that the scientific mode of inquiry is the only legitimate source of knowledge. Even the empiricist philosophers ignored the environmental and cultural commons, other cultural ways of knowing, and the environmental destruction of their times. The early foundations of double bind thinking, including the silences and prejudices found in Plato's thinking, are still being reproduced

in courses when students are not being told that words have a history—and that abstract words framed by the earlier choice of analogies reproduce the same silences, prejudices, and myths that were taken for granted in earlier times.

This process of domination of the present by the past even can be seen in how Adam Smith's arguments in defense of free markets and the efficacy of the "invisible hand" are relied upon today by proponents of economic globalization, in how the meaning of the word "tradition" still carries forward the Enlightenment idea that traditions are sources of oppression and backwardness, in how critical inquiry is now associated with initiating changes—but not with determining what needs to be conserved in an increasingly political and ecologically problematic world. Double bind thinking can also be seen in how environmentalists such as E.O. Wilson continue to refer to the brain as a machine, and a problem in engineering-- and in Richard Dawkins' way of reproducing the root metaphor of early scientists who understood the world as having the properties of a machine. The historically constituted analogies that framed the meaning of such words as individualism, freedom, tradition, property, environment, progress, woman, progress, rationalism, and so forth, displaced earlier analogies, and represented what was for the times a more advanced and enlightened way of thinking. The double bind occurs when we fail to question whether the analogies that were settled upon hundreds, even thousands of years ago are still appropriate to thinking in a culturally diverse and ecologically degraded world.

Academics must become aware of how the conduit view of language makes it difficult to recognize how the metaphorical nature of language carries forward the misconceptions of earlier thinkers who assumed that freedom, individualism, progress, market economies, and so forth could be pursued without limits—and without a concern about their colonizing implications. If professors are to avoid reinforcing the meaning of words that continue to perpetuate an individually-centered and consumer dependent lifestyle, they will need to help students understand both the deepest levels of double bind thinking as well as how to associate the meaning of words with analogies that bring into focus the intergenerational, culturally diverse, and interdependent relationships essential to sustaining the viability of natural systems. A current example of escaping the domination of earlier analogies can be seen in how the word "woman", within some

segments of society, is no longer associated with limited personal attributes and career possibilities-- but now includes being an artist, engineer, philosopher, historian, and so forth.

The reconstituting of the metaphorical language by earlier philosophers and political theorists was based on the taken for granted root metaphors of the times. These root metaphors (explanatory frameworks derived by the mythopoetic narratives and powerful evocative experiences that influenced thinking and behavior across a wide range of cultural experience) included patriarchy, anthropocentrism, and ethnocentrism-which are now being challenged. Other root metaphors such as individualism, progress, mechanism, economism, and now evolution which is now being extended to explain which cultures meet the test of Darwinian fitness (an extension that supports the market liberal ideology that is putting humans and natural systems at risk of extinction) still provide the taken for granted interpretive frameworks in many university courses where sustainability issues are being discussed.

A particularly cogent example is how environmentalists continue to identify themselves with liberalism, even though both social justice and market liberalism (with the latter, in good Orwellian fashion, being referred to as conservatism) are based on a combination of root metaphors that can be traced back to the thinking of Locke, Smith, Bentham, Spencer, and, more recently, Dewey. That is, most environmentalists, along with philosophers and linguists such as Mark Johnson and George Lakoff, fail to recognize that renewing the intergenerational knowledge, skills, and mutual support systems that enable people to live less consumer dependent lives, and that renewing and protecting the environmental commons from being exploited by market liberals, are more in the tradition of conservatism that can be traced back to Edmund Burke and that finds current expression in the writings of Wendell Berry and Vandana Shiva.

There is a new root metaphor (explanatory framework) that provides a way of reframing the words that still carry forward the thinking of Locke, Smith, and the other thinkers who gave us the now reified (which is the highest expression of de-contextualized thinking) analogs for how to understand words such as individualism, progress, freedom, mechanism, and economism that have put us on the pathway that is exceeding what the natural systems can support. Ecology is the new root metaphor,

which is actually old in terms of early Greek history and in terms of other non-Western cultures that learned to adapt to the limits and possibilities of the bioregions they depend upon.

The challenge for professors is to avoid the double bind thinking that occurs when they engage students in discussing sustainability issues while reinforcing the same image and root metaphors that were the taken for granted symbolic foundations of their own graduate studies. Meeting this challenge will require special attributes that are not always found in professors who have attained great distinction within their field of research, and who have been acclaimed as great teachers by earlier generations of students who understood success as being achieved within the competitive industrial paradigm. Professors must be willing to examine their own taken for granted beliefs and values. They must also be aware not only of the historical dynamics of metaphorical thinking that lead to double bind thinking, but also the dynamics of how to give words new meanings by identifying analogies that are culturally and ecologically informe

A case in point is how the root metaphor of ecology is often being used in a way that reinforces double bind thinking. That is, many environmentally-oriented professors continue to carry forward the narrower understanding that Ernest Haeckel imposed on the early Greek understanding of *oikos*. For the early Greeks who were definitely not in the Platonic tradition of supposedly pure abstract thinking, *oikos* (what we now interpret as ecology), referred to the management of the relationships and activities of the household. For Haeckel, *Oecologie* referred to the study of the interrelations within natural systems, and the earlier Greek understanding which could easily have been extended to understanding the relations and practices within the culture of the household, and between cultures, was lost sight of. In terms of this example, the problem of double bind thinking was accepting Haeckel's analogies, which led subsequent generations of scientists and other academics to focus attention narrowly on the environmental commons. While there are over twelve thousand abstracts of papers that address the environmental commons listed in the Digital Library of the Commons, there are only a handful that refer to the cultural commons—which was the focus of the early Greeks. Indeed, the use of the phrase cultural commons is usually met with blank stares—especially by scientists who continue to perpetuate Haeckel's understanding that

excludes an awareness of the cultural alternatives to an individually centered and consumer dependent existence that is so environmentally destructive. This example suggests that, in some instances, older analogies that gave words a more inclusive meaning may need to be recovered as the basis of current thinking. It also points to the way in which special interest groups can reframe the meaning of words in ways that serve their interests—which in turn leads to solutions that are based on a limited understanding of the problem.

Identifying analogs that are culturally and ecologically informed and that help to avoid the problem of double bind thinking will be a difficult challenge, particularly since the larger language community will continue to rely upon the meaning of words that carry forward the misconceptions that equate economic globalization with progress, even though this form of progress is accelerating the rate of environmental degradation. That many university graduates occupy positions of power and authority in promoting economic globalization, yet are unable to recognize the double bind of promoting an individually-centered/free market/consumer dependent lifestyle that is further limiting hundreds of millions of people's access to water, protein, and shelter, is further evidence of the failure of past and current generations of academics to recognize the dangers of double bind thinking.

It took women hundreds of years to win acceptance among a certain segment of society that the analogies that framed the meaning of the word "woman" could include a wide range of possibilities that were unthinkable in the past. Activists in Third World countries are also challenging the analogs chosen by Western thinkers that represent them as undeveloped and thus in need of adopting the Western economy and consumer lifestyle. Unfortunately, the rate of global warming, changes in the chemistry of the world's oceans, the availability of potable water, (to cite just a few of the environmental changes that cannot be reversed within our lifetime) will not allow us the same amount of time to correct the problem of double bind thinking that is still being perpetuated in Western universities—and in non-Western universities where professors are reproducing the double bind thinking of the Western professors with whom they studied for their advanced degrees.

Chapter Four: How the Linguistic Complicity of George Lakoff Supports the Market Liberal's Agenda of Enclosing the Cultural and Environmental Commons

George Lakoff has made important contributions to our understanding of the nature of metaphorical thinking and its role in framing how we think and communicate. One of his important insights is that "words don't have meaning in isolation. Words are defined relative to a conceptual system." (2002, p. 29) Unfortunately, one of his shortcomings is that he failed to recognize that the origins of conceptual systems are culturally specific and that they have a history. These conceptual systems, which vary from culture to culture, reflect the power of root metaphors such as the Western root metaphors of patriarchy, progress, mechanism, and individualism. When it comes to his writings on the differences between how liberals and conservatives think Lakoff demonstrates yet another shortcoming that brings his whole project into question. That is, his effort to clarify the values and ideas that separate liberals and conservatives ignores the ecological crises, the enclosing of the world's diverse cultural and environmental commons by the forces of economic globalization, and the undermining of our democratic institutions by the coalition of market liberal and Christian fundamentalists.

Thus, my advice is that if you are concerned about conserving species and habitats, conserving what remains of the non-monetized local cultural commons and the intergenerational knowledge it is based upon, and conserving such traditions as an independent judiciary, separation of church and state, and the separation of power between the three branches of government, it is important that you do not take George Lakoff as an authority on how to control the frame governing political debates. His two books that attempt to explain how conservatives and liberals think, Moral Politics: How Liberals and Conservatives Think (2002) and the more simplified treatment he gives to the same themes, Don't Think of an Elephant: Know Your Values and Frame the Debate (2004), are outstanding examples of how authors often ignore the advice they want others to follow. Many of his insights about how right-wing extremists have succeeded in becoming the dominant force in American politics are essentially correct—including their

long-term approach to establishing the institutes that serve as the incubators for formulating market-liberal policies, and the strategies for achieving them.

However, he ignores his own advice on the more critical issue of using the word "progressive" as the primary metaphor for carrying the fight to the "conservatives". That is, by ignoring that the right wing extremists are actually a coalition of market-liberal and Christian fundamentalists, he has accepted their take-over (framing) of the word conservative. At the same time, he ignores that a number of the cultural assumptions that underlie what he represents as a progressive, nurturing approach to politics are also the same assumptions that underlie the industrial, consumer-oriented culture that the market-liberals want to expand on a global basis. What is particularly surprising is that the examples of conservative beliefs and values that Lakoff cites turn out to be the core features of the free-market system. His lack of knowledge of the history of ideas is demonstrated when he cites Adam Smith's principle of laissez-faire as one of the conceptual and moral foundations of the today's conservatives. And his indifference to doing the necessary background research of current institutes that he labels as conservative can also been seen if one goes to the websites of the CATO and the American Enterprise Institutes. Both have posted statements on their websites that their political philosophy should not be identified as conservative as that "smacks of an unwillingness to change"--as it is noted on the CATO website. Both institutes also claim that they promote free markets and a diminished role for government. On an earlier CATO website posting titled "About Us" the point was made that only in America are people so uninformed that they identify the institute with a conservative agenda. And in labeling William F. Buckley Jr. as a leading conservative thinker, one wonders if Lakoff simply assumed that it was unnecessary to read how free markets were promoted in the National Review in order to assess the accuracy of Buckley's claim to being a conservative. Perhaps evidence contrary to what fits neatly into his preconceived political categories was too risky for him to pursue.

If Lakoff possessed a more historical understanding of the layered nature of metaphorical thinking, he might have realized that the same root metaphors of individualism, anthropocentrism, and progress as an inherent characteristic of change (along with the hubris of an ethnocentric way of thinking) that support his use of

"progressive" as his legitimating metaphor are also taken-for-granted by the market-liberals. By directing his fire against what he thinks conservatism stands for, he forces the environmentalists and social justice advocates to identify themselves as progressive thinkers—even though there is nothing as progressive in terms of undermining important traditions (such as privacy, non-monetized relationships and activities) as the constant stream of technological innovations and the efforts to turn more of the cultural commons into the markets of an ever-expanding industrial/consumer-dependent culture.

Lakoff's metaphor of the "strict father figure", which he discusses at length in both books, cannot be traced back to the ideas of intergenerational responsibility that is at the center of Edmund Burke's conservatism, now can it be found in the writings of such environmental conservatives as Wendell Berry and Vandana Shiva. If Lakoff had done his homework he would have found that the image of the "strict father figure" , as well as the idea that the rich should receive further rewards while the poor deserve to suffer further impoverishment, has its roots in the fundamentalist Christians' understanding of a wrathful God. Deuteronomy 28 provides the analog for understanding the God/human as well as the rich/poor relationships that the fundamentalist Christians take-for-granted. The reductionist and dichotomous pattern of thinking that characterizes the fundamentalist Christians' approach to such policy issues as gay marriage, reproductive rights of women, and the teaching of "intelligent design" can also be found in their claim to know the will of God—and to being God's regents until the Second Coming.

If one follows current political events it should be abundantly clear that both market-liberal and Christian fundamentalists are working together to overturn the traditions of the separation of church and state, an independent judiciary, and the separation of powers between the three branches of government. They are making progress, to use Lakoff's favorite metaphor, in undermining the gains made over the last decades in the areas of social justice and, more recently, in environmental protection. Returning the economy to a free-market system that is governed by the supposed natural law of supply and demand, and winning more converts that declare Jesus Christ as their personal savior, is the "progressive" agenda of these two groups. If Lakoff had given

attention to the actual political agenda of these two groups, it might have occurred to him to ask "What is it that the market-liberal and Christian fundamentalists want to conserve?

Reactionary is not part of Lakoff's political vocabulary. Instead of referring to market-liberals and fundamentalist Christians as conservatives --when, in fact, today's market-liberals want to go back to the Truths held several hundred years ago, and today's fundamentalist Christians want to go back to the Truths held several thousand years ago-- he should have used the more accurate labels of "reactionary" and "anti-democratic". The fundamental difference between a mindful conservative and a reactionary thinker is highlighted in the speech that Supreme Court Justice Antonin Scalia gave at the University of Chicago in 2002. In a speech titled "God's Justice and Ours," he acknowledged that he did not subscribe to "the conventional fallacy that the Constitution is a 'living document'—that is, a text that means from age to age whatever society (or perhaps the Courts) think it ought to mean." In effect, Scalia is claiming that the political consensus reached over the last two hundred or so years on social justice issues should not be conserved. Rather, the achievements of the democratic process must be rejected in favor of using the "original intent" of the men who wrote the Constitution as the guide for judging which laws are appropriate for the country to live by. The analog for understanding what reactionary means is the person such as Scalia who wants to go back to the"Truths" of an earlier time and thus to claim that the achievements in recent years have no significance.

A conservative in the Burkean tradition would want to conserve the political achievements of the recent past—including, within our historical context, the democratic process itself. Journalists and media pundits commit the same error that underlies Lakoff's context-free use of the conservative metaphor by referring to Scalia as a conservative when it would be more accurate, in light of his ideas, to refer to him as a "reactionary extremist." That is, he wants to force the nation to go back to an earlier way of thinking—one that could not anticipate the issues we now face. Lakoff's use of conservative is context-free as he does not ask what the people he labels as conservative want to conserve. If he had the insight to explore further the deeper and largely unrecognized implications of Scalia's doctrine of "original intent" he would have found

that it is really a subterfuge for declaring unconstitutional federal laws that regulate corporate abuses and that provide a safety net for the nation's poor and marginalized.

There are a number of possible reasons that Lakoff reproduces the formulaic thinking that reduces our political categories to that of conservative and liberal. One plausible explanation is that he wants to ground the theory of metaphor as a branch of cognitive science, which leads him to argue that repetition in the use of preferred metaphors alters the synapses in the brain. As all languages illuminate and hide, which is an aspect of the process of framing which interpretative system is to be used, Lakoff's scientific orientation marginalizes the importance of understanding the historical nature of how root metaphors (the meta-cognitive schemata) frame the process of thinking over hundreds, even thousands of years—and over a wide range of cultural practices. Examples of root metaphors in the West include mechanism, individualism, patriarchy, progress, anthropocentrism, and, now, evolution. The root metaphors of patriarchy and anthropocentrism (both still held by the market-liberal, fundamentalist Christian coalition) are being challenged by social justice advocates, while "ecology" is beginning to be used as a root metaphor by people concerned with conserving the environmental and the cultural commons.

If Lakoff had adopted an historical perspective on how metaphors carry forward over many generations the analogs that made sense before there was an awareness of environmental limits, and before the various forms of social inequalities were challenged, he might have avoided creating the linguistic double bind that he now wants to saddle social justice and environmental advocates with. That is, his use of "progressive" as the label for many groups, such as environmentalists and civil libertarians , precludes using the vocabulary that foregrounds the real political issues that are on the verge of being decided by the market-liberal and Christian fundamentalists' understanding of what constitutes progress. Referring to civil libertarians as "progressives" suggests that they are oriented toward change. This frame hides what they are really about, which is conserving the liberties and protections that the Constitution guarantees. Instead of using "progress" as a context-free metaphor (that is, as metaphor that has no historically-grounded analogs) that market-liberals have a history of identifying with, Lakoff should have used social and eco-justice as his umbrella (root) metaphors. Civil libertarians are

concerned with using the law to achieve social justice; while environmentalists are concerned with eco-justice (that is, conserving the cultural and environmental commons for future generations of humans and natural systems). Tagging environmentalists with the same context-free metaphor that the timber industry uses to justify cutting what remains of the old growth forests, and that corporations use to describe their special relationship with the Bush administration that allows them to help role back environmental legislation, is equally problematic.

Lakoff's insights about how words, and the conceptual systems that people associate with them, frame what will be the focus of political discourse as well as what will be ignored is essentially correct. His mistake, which he shares with most journalists, media pundits, along with other university graduates that should know better, is in not recognizing the many ways the different expressions of conservatism are an inescapable aspect of everyday life. These include temperamental conservatism which we all share in various ways: the food, conversations, friends, place-based experiences, degree of privacy, and so on, that we are comfortable with. This form of conservatism has no specific ideological orientation—but it is a form of conservatism shared even by ideologues who ignore their own experiences in rejecting all forms of conservatism. In speaking and thinking within the language of our cultural group, we carry forward (conserve) the taken-for-granted patterns of the culture's multiple forms of communication. Depending upon the culture, these taken-for-granted patterns may be given individualized expression, with some of the patterns being made explicit in ways that lead to reform or to conscious efforts at conserving them. There is also the misnamed "conservatism" that is based on the free-market, progress-oriented ideology promoted by the CATO and American Enterprise Institutes that emphasize the autonomous individual as the basic unit of rational decision-making and social change. And there is a long-standing tradition of philosophic conservatism that began with Burke, and has included critics of de-humanizing technologies such as William Morris and Michael Oakeshott. In America, philosophic conservatives presented the cautionary warnings that led to a system of indirect democracy, checks and balances, separation of church and state. As environmental conservatives such as Wendell Berry and Aldo Leopold have appeared on the scene more recently, their writings can also be legitimately

included in the category of philosophical conservatism. The recent efforts of a small group of scientists to get their colleagues to take seriously what they call the "precautionary principle" before introducing new technologies into the environment is yet another expression of conservative thinking. However, the oldest form of conservatism that needs to be revitalized is the conserving of the non-monetized intergenerational knowledge, skills, and activities that enabled people to live more mutually supportive and less money dependent lives. It is this form of conservatism that is now being undermined by market liberals who equate progress with turning what remains of the cultural commons into new markets, and the forms of dependency that come with them. What Lakoff does not recognize is that our traditions of civil liberties are also part of our cultural commons, and that they should not be entrusted to the market liberal and Christian fundamentalists who are now taking the country down the politically slippery slope toward an authoritarian future that they equate with progress.

Lakoff's limited political vocabulary not only misrepresents who his label of conservative is supposed to fit, but it also leads to a continuation of the intellectual poverty that now characterizes today's political discourse. Most university professors share Lakoff's formulaic misuse of the term conservative, which they use as the label for President George W. Bush's domestic and foreign policies, fundamentalist Christians, Supreme Court justices such as Scalia and Thomas, and the efforts of most corporations to promote the globalization of the West's industrial, consumer-dependent culture. A consequence of this formulaic thinking is that few university professors take seriously the need for university graduates to have a knowledge of the history of political thought in the West.

The cultural root metaphors of mechanism, individualism, progress, anthropocentrism , as well as the ethnocentrism that frames so much of the content of university courses, contributes to why so many graduates make what appears as the seamless transition from the classroom to working for the market-liberal goals of the Bush administration. Without this historical knowledge of what separates the tradition of philosophic conservatism from the thinking of classical liberalism, many self-labeled "conservative" students on university campuses are unaware that their ideas are derived from the classical liberal thinkers, plus more contemporary libertarian theorists. And

many of the professors that continue to misrepresent what today's faux conservatives stand for fail to recognize that their liberalism shares many of the assumptions that underlie the industrial culture they criticize for the social and environmental injustices they perpetuate.

In light of the scale of environmental changes that are now impacting people's lives, what universities should be helping students to understand is the nature and importance of revitalizing what remains of the cultural and environmental commons—for reasons that have to do with learning how to live more community-centered and less money dependent lives, with reducing our ecological foot-print by becoming less dependent upon industrial foods, health care, leisure activities, and so on, and with ensuring that the diversity of the world's cultural commons (including the diversity of cultural languages) are not further diminished. The potential of the world's diverse cultural commons to become sites of resistance to the further expansion of economic globalization is not learned in most universities. The importance of the cultural commons as alternatives to the very real possibility of ecological collapse that Jared Diamond writes about will continue to be marginalized by the way Lakoff reinforces the formulaic thinking of most university professors. The irony is that both the mislabeled conservatives and the self-identified liberals (again a form of mislabeling) possess the liberal vocabulary that came into existence before there was an awareness of environmental limits, and that there are different cultural ways of knowing. A further irony is that their shared liberal vocabulary, where the emphasis is placed either on the metaphors that justify expanding markets and profits or on addressing unresolved social justice issues that prevent people from participating more fully in a market economy, has been used in the past to further undermine the cultural commons by promoting a consumer-dependent existence.

Chapter Five The Double Bind of Environmentalists Who Identify Themselves as Liberals

Paul Krugman's ends his new book, <u>The Conscience of a Liberal</u>, with a startling statement. While claiming to be an activist with the energy of a progressive, he makes

the claim that "to be a liberal is in a sense to be a conservative" (p. 70). The reader is partly prepared for this seeming contradiction by the opening paragraph of his last chapter,"The Conscience of a Liberal", where he states that one of the seeming paradoxes of America in the early twenty-first century is that the agenda of liberals is essentially a conservative one: to restore the middle class, to defend social security and Medicare, the rule of law and democratic principles. The agenda of today's conservatives, as he puts it, is to reverse the achievements of Roosevelt's New Deal and to promote the free enterprise system—no matter what the human cost. What George Lakoff referred to as the "Essential Guide for Progressives", which is the sub- title of his book Don't Think of an Elephant, also contains the same view of conservatives. But unlike Krugman, he sees no paradox in identifying as liberal progressives the advocates of conserving our traditions of civil liberties, species and habitats, and what remains of the traditions of ethnic groups.

Unfortunately, both Krugman and Lakoff reproduce today's formulaic thinking that represents the anti-democratic and anti-social justice agenda of President George W. Bush as the expression of modern conservatism. And both reinforce the widely held misconception that Adam Smith's principle of laissez-faire, with its magical "invisible hand", is one of the conceptual and moral foundations of today's conservatives—when it is a foundational belief of market liberals. While both Krugman and Lakoff also agree that the success of conservatives can be traced to what they refer to as the conservative think tanks, such as the CATO, American Enterprise, and Hoover Institutes, they fail to question whether they have correctly labeled the political agenda of these institutes.

For anyone who has read the writings of early theorists of classical liberalism such as John Locke, Adam Smith, and John Stuart Mill—as well as the writings of philosophical conservatives such as Edmund Burke, Samuel Coleridge (pejoratively identified as one of the "Romantics" when he was actually a critic of the dehumanizing impact of the Industrial Revolution), the authors of The Federalists Papers, Michael Oakeshott and T. S. Eliot, the current use of political labels by self-identified liberals and conservatives is evidence of something fundamentally wrong with our educational system—especially our universities. Not to be outdone by Krugman, Lakoff, and other commentators who are mislabeling America's retreat into the hell hole of friend/enemy

politics, is the handy work of self-identified conservatives such as Rush Limbaugh who demonstrates a similar disregard for the fact that words have a history.

As most Americans are also unaware that words have a history, and that they can carry forward over many generations both the misconceptions as well as the wisdom of past thinkers, they are easily influenced by Limbaugh and the other faux conservative voices that have gained a strong foothold in the media. Thus, many people readily accept that the recent Supreme Court Justice appointments bent on reversing previous Supreme Court decisions are conservatives—because that is what journalists and political pundits tell them. That the doctrine of "original intent" is really part of the market liberal strategy for reversing laws that regulate business practices on the grounds that this function of government was not provided for by the men who wrote the Constitution will also go unrecognized. In effect, the faux conservative media voices, including otherwise intelligent observers of the American political scene such as Bill Moyers who also mis-identifies the market liberal agenda of President George W. Bush and his base of supporters, have taken on the role of educators of the nation as to which agenda fits under which political label. Unfortunately, universities largely have abdicated their responsibility for introducing students to the history of liberal and conservative thought. Without this background knowledge, which many academics also lack, the meaning of words such as liberal, progressive, tradition, conservative, become context free metaphors that can be reframed without any form of accountability other than what fits the interests of groups seeking to impose their agenda on others.

Ironically, while liberals such as Krugman and Lakoff are unconsciously complicit in reinforcing the current misuse of our political vocabulary, the institutes they identify as the seed beds of modern conservative thinking such as the CATO, American Enterprise, and Hoover Institutes, identify themselves in a way that acknowledges their classical liberal lineage. According to the mission statement of the Hoover Institute, its primary purpose is to promote "the principles of individual, economic, and political freedom" and "private enterprise". The American Enterprise Institute makes an identical claim on its website to defend the same classical liberal principles; but puts them in this order: "the institutions of American freedom and democratic capitalism—limited government, private enterprise, individual freedom and responsibility, vigilant and

effective defense and foreign policies, political accountability, and open debate. The mission statement of the CATO Institute, which had a budget last year of 22.4 million dollars, includes what the institute explicitly acknowledges as its "market-liberal" agenda of promoting "limited government, individual liberty, free markets, and peace". Its mission statement includes the observation that seems to have escaped the attention of liberal commentators who continue to identify the CATO institute as a conservative think tank. To quote directly: " 'Conservative' smacks of an unwillingness to change, of a desire to preserve the status quo. Only in America do people seem to refer to free-market capitalism –the most progressive, dynamic, and ever –changing system the world has ever known –as conservative".

The use of the label "neo-conservative" and now "neocons" is yet another example of formulaic word play. Awareness of the history of this group, which now justifies the invasion of Iraq, defends extraordinary rendition and the use of torture, and is promoting war with Iran, should originally have led to their being tagged with the label of market liberal—and, more recently, as anti-democratic extremists. Given their current political and economic agenda labeling them as neo-Fascists would not be too far off the mark. Two early books that were mislabeled as examples of neo-conservative thinking included George Gilder's <u>Wealth and Capitalism</u> (1981) and Michael Novak's <u>The Spirit of Democratic Capitalism</u> (1982). Neither one addressed the ideas of philosophic conservative thinkers such as Burke and Oakeshott. Other early spokespersons for what was mistakenly referred to as neoconservatism, such as Irving Kristol, Gertrude Himmelfarb, and Norman Podhoretz, attacked what they considered as the social engineering approach of their former liberal colleagues. They revived the laissez-faire liberal argument for reducing the role of government in providing programs that enabled people to escape from poverty and limited opportunities. The true responsibility of government, as William Kristol would later put it, is to promote the "politics of liberty" and the "sociology of virtue". What he and other neoconservatives meant by these high-sounding phrases is that the government should eliminate the anti-poverty programs and, in their place, promote the social uplifting potential of capitalism.

The inability of our leading intellectuals to recognize the travesty in labeling this group as neoconservatives is now being repeated on a daily basis in the media. Every

effort of the Bush Administration to dismantle our checks and balances system of government, and to turn the previous functions of government over to capitalists who place their own interests above those of the public, is identified with conservatism. The practices of extraordinary rendition and Presidential signing statements, along with putting in place the technology for achieving a total surveillance society, are similarly represented as carrying out the true mission of conservatism in an era of total warfare with the external enemies of the American way of life.

This current Orwellian political discourse serves two purposes. For many Americans who experience the rapid rate of cultural change as a threat to life as they know it, the constant references to the conservatism of the present administration is reassuring—even if they do not understand the political system that is at the end of the slippery slope President Bush and Vice-President Cheney are leading them down. In effect, the market liberal and anti-democratic extremists gain much of their support from this largely non-reflective segment of society. And as the term conservative becomes increasingly associated with an anti-social and anti-ecojustice agenda, advocates of social justice continue to identify themselves as liberals without questioning the double bind this puts them in.

The double bind that few liberals recognize is that the deep, largely taken-for-granted cultural assumptions that underlie Western liberalism are, with only a few exceptions, the same assumptions that gave conceptual direction and moral legitimacy to the Industrial Revolution that has now entered the digital phase of globalization. These assumptions underlie the liberal's penchant for equating change with progress, for representing the autonomous individual as the highest expression of human development, for thinking of the environment as needing to be brought under rational control, and for imposing their way of thinking on what they regard as the less developed cultures of the world. What is seldom recognized is that the Industrial Revolution required the autonomous individual who, in lacking the intergenerational knowledge and support of community, would be dependent upon consumerism to survive. Similarly, the driving force of the Industrial Revolution was the constant quest for progress in developing new technologies and markets. The Industrial Revolution also depended upon advances in science and technology in order to further exploit the Earth's natural systems.. The

liberal view of other cultures as needing to adopt the Western model of development also fits what the Industrial Revolution required.

Yet there continue to be differences between how liberals understand the nature of progress. A useful way of identifying these differences is to identify liberals working to alleviate poverty and various forms of exploitation as social justice liberals. Liberals who use critical inquiry to develop new technologies and to exploit new markets should be labeled as market liberals. The former were and continue to be critical of the exploitive nature of the free enterprise system, while the latter were and still are willing to let the "invisible hand" supposedly operating in the free market system distribute the benefits to the deserving—which usually means those who are already privileged. Given these differences, and they are hugely important, the two groups of liberals nevertheless share a common set of silences and prejudices. Already mentioned is their shared prejudice of the knowledge systems of other cultures—particularly indigenous cultures. They also share a very narrow and thus basic misunderstanding of the nature and importance of cultural traditions. In effect, they both fail to recognize the misconceptions of the Enlightenment thinkers who only identified oppressive traditions, and did not understand the intergenerational knowledge and skills that enabled communities to be more self-sufficient and to have complex symbolic lives. And both social justice and market liberals fail to understand that language is not simply a conduit in a sender/receiver process of communication, but instead is metaphorically layered in ways that reproduce past misconceptions in today's taken-for-granted patterns of thinking. This latter oversight accounts for how both social justice and market liberals are continually embracing whatever is represented as a progressive step forward—and not asking about which traditions vital to the well-being of community and to a sustainable future are being lost.

There are many unrecognized assumptions that are shared by students on university campuses who identify themselves as conservatives and the professors whom they regard as subverting the American way of life. Again, the failure to recognize the shared assumptions and silences can, in part, be traced to the failure of universities to engage students in a discussion of the writings of the early political theorists whose influence continues to today. The misunderstandings resulting from this lack of historical

knowledge are particularly evident when the beliefs and values of the self-identified conservative students are compared with the market liberal agenda promoted by the CATO and American Enterprise Institutes. Indeed, they turn out to be nearly identical—though some of these students balk at the idea of open debate as advocated by the American Enterprise Institute. As most university faculty embrace social justice liberalism they see no reason to introduce students to the thinking of philosophical conservatives or to the ideas of classical liberal thinkers. And the few social justice faculty who are introducing their students to the writings of environmental writers such as Rachel Carson, Aldo Leopold, Wendell Berry, and Vandana Shiva fail to clarify for students that these are essentially conservative environmental thinkers. By not engaging students in discussions of the different forms of conservatism, including the faux conservatism of President George W. Bush and his religious, corporate, and military base of support, students are more likely to accept without question Lakoff's designation of environmentalists as liberal progressive activists. And they will continue to perpetuate the silences and prejudices that have been an aspect of liberal thinking since the time of the Enlightenment—which will keep them from recognizing that revitalizing the diversity of the world's cultural commons will be a necessary part of achieving a sustainable future.

The reports of the Intergovernmental Panel on Climate Control, which reflect the consensus thinking of 600 scientists from more than 100 countries on the nature and causes of global warming, brings into focus another aspect of the slippery slope that both the market and social justice liberals are greasing. As the melting of the permafrost in the northern latitudes release the vast quantity of methane gas that is an even greater contributor to global warming than carbon dioxide, as the glaciers that are the source of fresh water for hundreds of millions of people disappear, as the temperature of the world's oceans rise and as the oceans absorb more CO_2 that contribute to their increased acidity, as droughts and changes in weather patterns forces the migration of plants, animals, and people, and as more of the world's major fisheries near collapse, the convergence of the slippery slope leading to environmental catastrophe with the slippery slope leading to a fascist form of government become a more likely possibility. What is not usually recognized is that the emergence of fascism between the two world wars resulted when democratic institutions became so weakened that they were no longer able

to address the sources of economic and social unrest.   People have demonstrated time and again that they prefer order over chaos, and they have often embraced the strong political leader who, as the supreme "decider", does away with the seemingly endless debates which are at the center of the democratic process. The convergence of economic unrest resulting from the globalization of the market liberal agenda with the deepening ecological crises could easily lead to a repeat of this earlier history.

Both market and social justice liberals carry forward the silences and prejudices that have been part of the legacy of Enlightenment thinkers—indeed some of these silences and prejudices can be traced back to the thinking of Plato who invented the idea of pure thinking that supposedly is free the of cultural influences carried forward through narratives. These include the intergenerational knowledge, skills, and activities that enable members of communities to live more self-sufficient and thus less money and consumer dependent lives. Working to conserve the diversity of the world's languages and thus the diversity of knowledge of local ecosystems is yet another critical area of concern that is not being given adequate attention by social justice liberals who, unlike Krugman, refuse to consider anything that is associated with the word conservatism—partly because they lack knowledge of the many forms of conserving that are an inescapable part of daily life-- and partly because the word conservatism is now associated with authoritarian politics and the pursuit of economic self-interest.

There are many other analogs than those associated with the ideas and policies of market liberals that need to be considered in determining the different meanings of the word "conservatism". Briefly, learning to think and communicate in the language of one's cultural groups conserves its many taken-for-granted patterns of thinking and values. Our DNA is also a powerful conserving force that influences the most fundamental aspects of our biology. The taken-for-granted nature of most of our cultural knowledge and values is also an inescapable aspect of what can be referred to as embodied conservatism. And then there is temperamental conservatism which is expressed in a preference for certain foods, wearing certain clothes, having certain friends, and so forth. These different expressions of conservatism are largely part of our embodied experiences, and are different in fundamental ways from conservative ideas of how societies should be organized and governed. In order to conserve the gains in social

justice and civil liberties it is important to keep in mind that not all of conservative ideas, such as those advocating the right of states to enforce racist policies, the cultural tradition of child brides, honor killings, and poll taxes, should be carried forward. On the other hand, the current practice of using the word to stigmatize individuals and groups who are more aware of the traditions that are the basis of their mutually supportive and intergenerationally connected communities should not be continued.

In order to make more informed judgments of about the different expressions of conservatism—judgments about what should be supported and what should be resisted—we need to expand our political vocabulary. In addition to rectifying our use of political terminology so that labels accurately reflect the beliefs and practices of different groups, we need to follow the practice of different religious groups who use adjectives that identify the religious group's specific orientation or the tradition it is part of. Examples include the distinction between Orthodox and Reform Judiasm, Greek Orthodox Christians and Evangelical Christians, moderate and fundamentalists Muslims, and so forth. The adjectives are not always as accurate as we would like, but they avoid the problem of including a wide range of interpretations and agendas under a single rubric. The distinction between market and social justice liberals is an example that has been introduced here. Other examples might include environmental conservatives and indigenous conservatives. The problem of relying upon a single rubric can be seen in Thomas Frank's reference to the Christians in Kansas who support President George W. Bush's efforts to dismantle the separation of powers and the Constitution as conservative. Referring to them as members of the religious right would have brought into focus their political agenda, which included abolishing abortion, gays, separation of church and state, and equal opportunities for women and other previously marginalized groups. Journalists and media pundits need to use the label of extremists if it accurately represents the political agenda of certain individuals and groups. For example, Vice-President Richard Cheney and David Addington need to be identified as extremists. And there is a need to use the label of fascist when it accurately fits the ideas and political agenda of an individual or group. It is important to note that few graduates of our universities possess a knowledge of the core ideas and practices shared by different

fascist regimes, and thus are unable to recognize political trends that are moving the society in that direction.

Most of all, we need to avoid the intellectual laziness that characterizes so much of our formulaic use of conservative and liberal. There is an urgent need for the more reflective people to criticize our universities for their failure to educate students about the history of ideas we now refer to as ideologies—including the need for them to understand which ideologies are contributing to overshooting the sustaining capacity of the Earth's natural systems. If we can't get this figured out we will continue to be caught in the double bind of promoting the globalization of the consumer dependent lifestyle while at the same time searching for the technologies that will slow the rate of global warming partly being caused by consumerism. And our difficulties will be further exacerbated if the current misuse of our most prominent political language continues to marginalize the awareness that in this era of political uncertainties and deepening ecological crises we need a political discourse that addresses what needs to be conserved.

Chapter Six: Revitalizing the Cultural Commons in an Era of Political and Ecological Uncertainties

The "commons" and "enclosure" are two words that should frame the issues being addressed by current presidential candidates. These words refer to fundamental relationships within human communities and between humans and the natural environment even before the beginning of religions and myths of origins. The significance of the commons has become even more critical today as economic globalization is rapidly enclosing the diversity of the world's commons, forcing more people to become participants in a money economy at the very time that the degradation of natural systems threaten species with extinction, and when the local economies that have a smaller ecological footprint are being overtaken by capitalist economies that benefit the few while further impoverishing the many.

The commons are now gaining the attention of academics, but to most of them the commons refers only to those aspects of the environment that have not been privatized, turned into a commodity, or require participating in the money economy. There are now over14,000 scholarly articles on the environmental commons written by academics listed

in the Digital Library of the Commons—and there are an increasing number of conferences focused on how the environmental commons are being enclosed by advances in techno-science and market forces. For the first humans living in the savannahs of what we now call Africa, the environmental commons included the water, plants, animals, and the land—and the access and use was available to all members of the group. What is seldom discussed by academics, and not at all by today's politicians, are the cultural commons. Indeed, the phrase "cultural commons" has only recently come into our vocabulary—even though what it refers to were the cultural practices that began with the first humans—spoken language, medicinal knowledge of plants, narratives, ceremonies, strategies for cooperating in the hunt, art, norms governing marriage, behaviors that violated the community's moral expectations, and so forth. In effect, the cultural commons includes what we more conventionally think of as culture. And just as all cultural beliefs and practices have an impact on the viability of the natural environment, the distinction I am introducing by using the two phrases of "cultural commons" and the "environmental commons" should not be understood as unrelated.

As mentioned at the outset, the current way of interpreting the commons to mean only the environment has the effect of marginalizing an awareness of the cultural commons—including the many ways the cultural commons contribute to a smaller ecological footprint. By overlooking the cultural commons, the forces of enclosure that should be resisted are being ignored. Readers may wonder why the words culture and community are not used. The reason is that these more familiar words lack the inherent tension that exists between the cultural and environmental commons and the processes of enclosure. The words commons and enclosure are like two sides of the same coin—one side cannot be fully understood without an awareness of the other side. The coin metaphor is limited however as the forces of enclosure have from the beginning threatened access to both the cultural and environmental commons. The introduction of status systems, social hierarchies, gender and racial biases, privatizing, monetizing, commoditizing, linguistic silences, ideologies, and so forth continually threaten what members of the community share in common—both in terms of the symbolic culture and in sharing the life sustaining characteristics of the natural environment. Enclosure, in

short, means both to be excluded from what others share in common and to have to pay for what previously was shared outside of a money economy.

The continual efforts to intergenerationally renew the traditions of the cultural commons (some of which were and still are sources of injustice and environmentally destructive practices) are very much related to the challenges facing today's communities. These challenges are becoming even more critical as the forces of enclosure undermine traditions of community self-sufficiency, local democracy, and intergenerational responsibility for not degrading the local ecosystems, which is now occurring as aquifers, plants, animals, land, and so forth are being privatized and turned into commodities. The market liberal ideology now being promoted on a global scale, as Naomi Klein documents in her book, The Shock Doctrine: The Rise of Disaster Capitalism (2007), is magnifying the double bind where the intergenerational knowledge and skills that enabled people to live less consumer dependent and less environmentally destructive lives is being replaced by the myth of progress and the seductions of a consumer lifestyle that fewer and fewer people will be able to afford—especially as the scarcities caused by a rapidly degraded environment raises the cost of basic food and shelter needed to sustain daily life.

As the focus of today's politicians and community leaders should be on revitalizing the local cultural commons as a way of reducing our ecological footprint, it is necessary to identify the daily manifestations of the cultural commons that people participate in largely at a taken-for-granted state of awareness. It is also necessary to discuss the many ways the local commons are being enclosed that go beyond the earlier (and still existing) forms of enclosure that were based on gender, ethnic, class, and linguistic differences. People are empowered by the traditions of the cultural commons when they rely upon the many forms of intergenerational knowledge of how to grow, prepare and preserve food, when they expect that their lives will be protected by habeas corpus and the rights guaranteed in the Constitution, when they engage in local decision making about conserving the environmental commons and about expanding on the social justice achievements of the past, participate in the expressive arts--including ceremonies and narratives that lead to a sense of being part of a moral and interdependent community, when they engage others in the games and crafts and learn to think within the

language of the community into which they are born, and so forth. The cultural commons exist in every community, and are as diverse as the world's cultures.

We should avoid romanticizing the cultural commons, as the narratives and daily practices may be based on intergenerational traditions that exclude and exploit groups based on gender, class, ethnic, religious differences. The traditions of racial and gender discrimination were (and still are) part of the cultural commons of many communities across America, just as honor killings and child brides are still part of the cultural commons of many Middle Eastern cultures. The vocabulary that carries forward the patterns of thinking of the past, and is largely taken for granted even by environmentalists such as when E. O Wilson and Richard Dawkins refer to the brain as a machine (which goes back the mechanistic patterns of thinking originating in the early days of Western science), also needs to be understood as part of the cultural commons. Even when the cultural commons perpetuate inequities and even environmentally destructive practices, there may be other aspects of the local cultural commons that are the basis of a less consumer dependent lifestyle. Examples that easily come to mind are the rich traditions of folk music and story telling that are part of the cultural commons in parts of the country that were also deeply racists. Therefore, it is specially important to recognize what needs to be conserved and intergenerationally renewed, and what needs to be reformed or entirely abandoned.

The first codification of what aspects of the commons could not be enclosed can be found in Roman law,but people today associate the process of enclosure with the Industrial Revolution. The need for vast quantities of raw material and an easily exploitable labor force, forced the people off the environmental commons and into the ghettos surrounding the new factories of the British Midlands. This "great transformation" that resulted, as Karl Polanyi observed, from universalizing the core principle of market liberalism turned the fields, forests, plants and animals that were shared in common into the new system of private ownership. This, in turn,made dependence upon a money economy where wages were paid at the lowest possible level the basis for obtaining food and shelter. Enclosure of their cultural commons also took place as traditions of food, local decision making, craft knowledge and patterns of mutual support yielded to the new reality dictated by the new industrial system. Today, the

processes of enclosure include the genetic engineering of sterile seeds that is forcing farmers to purchase seeds for the next year's planting (which also encloses much of the farmer's traditional knowledge and moral responsibility for sustainable farming practices); the industrially processed and prepared food that are replacing intergenerational and ethnic approaches to growing and sharing of meals; the spread and hype of commercialism—including the growing addiction to television and computer games-- that are enclosing the wisdom carried forward in ceremonies, narratives, and the expressive arts; the way the medical establishment, including the growing requirement for certification, are enclosing the intergenerational knowledge of the medicinal knowledge of plants and healing practices that have been refined over generations; the use of national security and defending the American way of life as justification for enclosing the traditions of privacy and habeas corpus. Indeed, one of the essential characteristics of market liberalism is that there are no moral constraints on enclosing all of the cultural and environmental commons.

Today's political discourse is silent about how the forms of enclosure are forcing people to become more dependent upon a money economy in an era of outsourcing, downsizing, and automation. Even though some democrats are questioning the market liberal inspired re-ordering of the nation's previous commitment to address the needs of the poor and marginalized, they fail to take account of how public schools and universities perpetuate the same deep cultural assumptions that underlie the various forms of enclosure. Nor are they addressing the fundamental life-threatening changes taking place in the natural systems such as how the chemistry of the world's oceans are becoming more acidic—thus threatening the viability of marine ecosystems that are the basis of the food chain. While scientists are reporting on their studies of how global warming is affecting the growing season in different regions of the world, the spread of droughts, the melting of glaciers that are the source of water for hundreds of millions of people living in the valleys below—all of which impact the viability of local economies, including the cultural commons that have been adapted to the sustaining characteristics of the bioregion, the politicians remain silent. This silence represents yet another form of enclosure of local decision making about the critical issues that are threatening the traditions of community self-sufficiency.

Critical to reducing the ecological footprint of humans is the need to sustain the diversity of the world's cultural and environmental commons. A recent development that makes this especially difficult is the way in which computers are being promoted on a global basis without any awareness of the form of individualism reinforced by this technology—or the forms of intergenerational knowledge and relationships that cannot be digitized. Another major reason that conserving what remains of the world's diversity of cultural and environmental commons will be especially difficult can be traced to what is being taught in public schools and universities—which will be discussed later. A source of hope is that there are ongoing efforts to limit the forces of enclosure. For example, conserving social justice traditions are being addressed by local groups such as the American Civil Liberties Union, by groups working with the homeless and segments of the community lacking food security. Other traditions of the cultural commons are being renewed by artists who are mentoring youth living on the streets; by parents, restaurant chefs, and other groups in the slow food movement that are working to pass on the traditions of eating locally grown food rather than being dependent upon industrial food transported on average over 1500 miles; by various forms of volunteerism in helping the sick, poor, and elderly to improve the quality of their daily lives, and by immigrants who continue, in their condition of mutually shared scarcity, their traditions of mutual support and indigenous gardens.

The variety of groups working to revitalize the environmental and cultural commons can be documented by a survey of activists in almost any community in North America. In many areas of the cultural commons, the revitalization is being done by older people who have retired and are finding new interests and talents in the various expressive arts and in working in one of the traditions of craft knowledge. Professionals from a variety of specializations are increasingly working to strengthen other traditions of the cultural commons—often by working in non-monetized relationships. There are thousands of books that address how to revitalize different aspects of the cultural and environmental commons—on a local and practical basis. Unfortunately, the influence of these efforts to renew the local cultural commons has not reversed the expansion of the markets, including the new forms of enclosure that are increasing people's dependence upon what has to be purchased. The connections between the processes of enclosure and

the rise of poverty and environmental destruction can be seen in the current level of credit-card debt, the increasing number of bankruptcies and people dependent upon local food banks, the amount of waste going into the local land fills, the amount of carbon dioxide being released into the atmosphere, the number of hours that youth and adults spend on computer games, and in cell phone conversations.

The current threat to the cultural and environmental commons brings us back to one of the problems identified at the outset: namely, that the importance of commons are not understood by most students who graduate from public schools and universities. Aside from the environmental commons that students encounter in their science and environmental education classes, and which do not usually engage students in a critical examination of the cultural assumptions that underlie behaviors and policies that degrade the local and global ecosystems, the nature of the cultural commons is one of the most critical areas of silence in their formal education. The questions thus become: what are the reasons for students graduating from public schools and universities without knowledge of how to reduce their dependence upon an industrial/consumer dependent lifestyle? Why do the cultural forces of enclosure continue to dominate in spite of the efforts of writers such as Wendell Berry, Vandana Shiva, Barbara Kingsolver, and even religious texts that are calling attention to the need to conserve the bio-diversity of God's creation? Why do the efforts of people working to find less carbon producing approaches to food, shelter, and transportation go largely unnoticed by the majority of graduates. As more of the Baby Boom generation discover that their individually managed 401K plan (which is part of strategy of corporations for increasing profits) will be inadequate for their retirement years, the failure of public schools and universities to educate them about how the local cultural commons represent alternatives to a life style dependent upon a money economy will take on more significance. These are the questions that public school teachers and university faculty should be considering.

Outside of the environmental sciences, where students are engaged in more activist efforts to conserve what remains of the local biodiversity, the small number of faculty in the social sciences, humanities, and in some professional schools are beginning to address the ecological crises by adding to their courses the writings of environmentalists such as Aldo Leopold, Wendell Berry, Berry Lopez, Rachel Carson,

Vandana Shiva, and so on. These readings are important because they increase student awareness of the need to live in more sustainable relationships with natural systems. Unfortunately, they do not provide students with the practical knowledge of sustainable living practices they will need after graduation. In effect, the efforts of local groups to revitalize both the local cultural and environmental commons are not being passed on to students. There are a couple of reasons for this, with the major one being that most faculty continue to think and teach within the discipline they learned from their graduate school experience and from colleagues in the discipline. Another reason is that practical knowledge is still looked upon by most academics in the social sciences and humanities as less important than the theory-based knowledge required in order to publish in the scholarly journals of their discipline (which is essential for promotion and acquiring tenure).

There is a more profound reason that students graduate from public schools and universities without an explicit knowledge of the local cultural commons, as well as knowledge of the world's diversity of cultural commons that are being integrated into the global economy by market liberal ideologues--including the true-believers in the Chicago School of economics. And that is that students are left largely ignorant of the interconnections between the enclosure of the cultural commons and the increased vulnerability people are experiencing as governments and corporations pursue their efforts to globalize a free market economy. There is another problem that is even more difficult to recognize because it is rooted in linguistic traditions that are still taken for granted. Most students graduate with a distinct bias that prevents them from taking seriously the intergenerational knowledge, skills, and patterns of mutual support that sustain the local cultural commons. This bias is passed on in the language that students first acquire in becoming members of the language community—and it continues to be reinforced at all levels of schooling, and in nearly every discipline. The sources of the bias are critical to understanding why most students, and many faculty, take for granted the same cultural assumptions that gave conceptual direction and moral legitimacy to the Industrial Revolution. Understanding how the language continues to frame current ways of thinking, even supposedly cutting edge thinking, in terms of the cultural assumptions that were constituted before there was an awareness of environmental limits and the

importance of adapting the cultural and environmental commons to what could be environmentally sustained, brings us to the important question of what educational reforms now need to be undertaken.

There are several reasons that make it difficult for market and social justice liberal professors (even those who are adding environmental writers to their courses) to recognize the cultural assumptions that frame their taken for granted patterns of thinking. One of these difficulties is the widely held idea that language is a conduit in a sender/receive process of communication. Accepting this view of language, as I have pointed out in the earlier essay, is essential to sustaining the myths that the rational process is uninfluenced by the taken for granted assumptions of the culture, and that objective data is obtained through observation and systems of measurement conducted by individuals who are able rid themselves of all cultural influences—including the metaphorically based language they rely upon to report their findings and to communicate with colleagues. How this conduit view of language sustains the myth of objective knowledge can be seen in how highly acclaimed scientists ignore the many ways culture influences thought, behaviors, and the silences that are ignored. The following predictions are examples of how the importance of cultural influences are ignored: Hans Moravec's prediction that computers represent the next stage in the process of evolution, Gregory Stock's prediction that computers are part of the process of natural selection that will lead to a global consciousness (and thus the elimination of the world's diversity of languages—which would be a disaster), and Francis Crick's prediction that scientists will shortly understand the nature of consciousness—and why some brains, which he refers to as machines, lead to various forms of creativity. Market liberals such as Milton Friedman, and his many followers, are also misled by the conduit view of language into ignoring differences in cultural ways of knowing—which leads them to promote the competitive lifestyle of the free enterprise system as the panacea for addressing the world's problems. Examples of how the conduit view of language influences other disciplines and professional schools can easily be cited. The most egregious is the current efforts of American and Canadian educators to promote the idea in Third World cultures that educational reforms should be based on the recognition that students learn best when they construct their own knowledge—which would have the

effect of further undermining the intergenerational knowledge and skills that are the basis of the local cultural commons.

Another reason that most students graduate with the belief that the industrial/consumer dependent culture represents the future, and that the intergenerational knowledge of the local community represents the backwardness of tradition, is that the metaphorical nature of the language that is so much a part of their taken for granted patterns of thinking carries forward the misconceptions of earlier generations who were influenced by the assumptions of Western philosophers and social theorists—particularly the Enlightenment thinkers and their followers such as John Dewey, Milton Friedman, George Lakoff, and the many techno-scientists who are turning our genes, sources of food, healing practices, communication and entertainment into commodities that are, when the benefits are compared to the losses, both environmentally disruptive and sources of impoverishment for the majority of the world's population.

The conduit view of language take for granted by most academics hides the metaphorical layered nature of language, especially how the current meaning of words were framed by the choice of analogies made by earlier theorists who were unaware of different cultural ways of knowing, ecological limits, and that the cultural commons represented alternatives to a consumer dependent lifestyle. The theorists who succeeded in framing through their choice of analogies how much of our vocabulary is understood and used today anticipated what has become the mantra of today's political leaders who advocate a continual process of change. That is, they shared the same assumptions that equated change with progress, and like both today's market and social justice liberals, they gave little attention to what needs to be conserved beyond the dynamics of change itself. The result is that the analogies of these Enlightenment theorists continue to frame the meaning of such words as tradition, conserving, and intergenerational knowledge. In short, the key words (metaphors) essential to a more balanced understanding of tradition, conserving, and intergenerational knowledge, non-monetized skills, and values-- which are essential to becoming aware of the cultural commons that people participate in as part of everyday life—carry forward the biases of the Enlightenment thinkers and their present-day followers. As the industrial/consumer culture sustains the current addiction for acquiring the latest cell phone, digital camera, and so forth, few youth are concerned

about the silences and biases perpetuated in the metaphorical language that is being reinforced in classrooms.

There is another issue that has particular relevance to the discussion of why the enclosure of the cultural commons is being ignored. Basically, it has to do with how an educational process that privileges print over face to face communication contributes to relying upon abstractions that divert awareness from the many dimensions of embodied/culturally mediated experience—which include memory, meaning, imagination, values, intentionality, self-identity, moral reciprocity (or lack of it), physical sensations, and the need to give expression to these experiences. Not only does print-based storage and communication reinforce a conduit view of language, marginalize awareness of local contexts and tacit understandings, and carry forward the analogies of earlier thinkers who framed the meaning of the words encountered on the page, it also has the effect of reducing awareness of one's embodied experience in the cultural commons—which involve relationships, interdependencies, awakening of personal interests, development of talents and skills, and moral reciprocity that is the glue of community. And when participating in the cultural commons is taken for granted, and thus below the level of conscious awareness, there is no real basis for comparing experiences in the industrial/consumer dependent culture with experiences in the cultural commons. In effect, the individual will move between the two culture and view them as seamless when the latter is actually creating new forms of dependencies and impoverishment. The lack of awareness that the two cultures have profoundly different implications for the quality of daily life, and for achieving an ecologically sustainable future, leads in turn to a state of indifference to the further enclosing of both the cultural and environmental commons. Evidence of this can be seen in how most Americans accepted the recent enclosure of key civil rights, the right of workers to strike, the shift in social priorities as market liberals diverted funds to the military in order to promote their vision of an American empire.

Educational reformers must take seriously Einstein's warning about the perils of double bind thinking. Double bind thinking can be seen in how the language that contributes to overshooting the sustaining limits of natural systems is the same language that is reinforced in today's public schools and universities—and even in courses that are

addressing environmental issues. If the readers thinks this is an over generalization, they should check out whether the local professors and classroom teachers are encouraging students to identify culturally and ecologically informed analogies for changing how such words as individualism, progress, tradition, conserving (and conservatism), liberalism, globalization, etc., are understood. More specifically, they should examine whether professors and teachers are challenging students to begin to base their thinking on the new root metaphors of ecology and sustainability rather than taking for granted the root metaphors of progress, individualism, mechanism, anthropocentrism, economism that underlie the industrial/consumer oriented culture. That the root metaphors and analogies of the past can be replaced can be seen in how educators, after much prodding, discovered that the root metaphor of patriarchy and the analogies dictated by this root metaphor, were the basis of gender discrimination.

Briefly, teachers and professors need to help students to become explicitly aware of the differences in their embodied/culturally mediated experiences as they move between the culture of the commons and the culture of industrially driven consumerism. Success will depend in part on helping students become more aware of the many past misconceptions about language. This will include becoming aware that language is not a neutral conduit in a sender/receiver process of communication, that words have a history and, as metaphors, their meaning may carry forward the misconceptions of earlier times, that print-based thinking and communication contributes to relying more on abstractions than on embodied/culturally mediated experiences, and that the root metaphors that gave conceptual direction and moral legitimacy to the industrial revolution and to the current agenda of economic globalization, are accelerating the rate of global warming and other forms of environmental degradation. As most professors and classroom teachers are caught in this linguistic double bind, they will need the help of others in society who have a clearer understanding of how the linguistic double binds are being perpetuated—just as others helped professors and classroom teachers recognize the linguistic basis of gender and racial discrimination—including the colonization of other cultures.

In addition to the educational reforms that must be undertaken, revitalizing the cultural and environmental commons must be seen as the responsibility of various groups that make up American society. This responsibility must be shared by

communities of faith, mentors in the various expressive arts, crafts, skills essential to the cultural commons, volunteers, and people dedicated to addressing issues of security in food and housing. People engaged in various forms of revitalization of the commons, even if they lack the theory framework that explains how the commons represent alternatives to a consumer dependent and environmentally destructive lifestyle, are modeling for youth the pathway that must be taken if we are to achieve a post-industrial future. But the effort to gain the attention of youth, especially in this era of hyper-consumerism, must engage youth in cultural commons activities that will help them to discover their own interest, talents, and sense of being a valued member of an intergenerationally connected community. Complaining about the cell phone and computer addicted youth culture will not work. Educational reforms can help students develop the conceptual understanding of which aspects of the cultural commons and industrial/consumer dependent experiences contribute to a sustainable future, and provide the historical perspective on the different forces that are enclosing the diversity of the world's cultural commons. But it is the members of the community who are intergenerationally renewing the cultural commons that need to reach out to youth.

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 Globalizaton**: 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.

Chapter Seven: Toward an Ecologically Sustainable Vocabulary

There are as many reasons for parents to home school their children and young adults as there are belief systems. The over one million home schooling parents representing various secular and religious traditions, from evangelical Christians to Quakers and social justice- oriented Protestants, find that much of the public school

curriculum undermines their belief systems. They also view public schools as alienating their children in a variety of ways: through a secular curriculum, through the pressure of student peer-group culture that is addicted to consumerism and materialistic values, and through the inability of many teachers to recognize and thus nourish the special talents that are not met by the public school curriculum. While the reasons for home schooling differ, many home schooling parents are becoming aware of the deepening ecological crises that is being given increasing attention in local newspapers and on television programs. Some are even beginning to recognize that there is a connection between the higher cost of living and what scientists are reporting about the increasingly degraded state of natural systems. But few home schooling parents know how to reduce the adverse impact of their lifestyle on natural systems other than to be more conscious about the need to recycle and to reduce their energy consumption.

University professors and public school teachers, while not always educating in ways that meet the special expectations of parents, nevertheless face many of the same problems. These include awakening to the fact that the environmental crises is now beginning to impact their own lives—and will have an even greater impact as their students become adults and parents. Yet few teachers have questioned the current assumption that environmental awareness can be left to the science faculty school's environmental science teacher.   And few teachers and professors recognize the need to introduce sustainability issues into the various subject areas that have traditionally been understood as unrelated to environmental issues and concerns. University faculty in various disciplines have made some progress toward developing greater environmental awareness by adding environmental writers to their courses. But there has been even less progress on the part of the nation's teacher education faculty. What is being taught by the school science teacher about the nature of ecosystems and habitat restoration provides little guidance on how courses in literature, social studies, mathematics, history, and so forth, can be modified in ways that will enable students to understand the cultural beliefs and practices that are accelerating the rate of global warming. When it comes to understanding how the patterns of thinking carried forward from the distant past continue to limit awareness of why the culture's approach to progress is accelerating the rate of global warming, the school science teacher is as limited as the rest of the teachers in the

school. In effect, both public school teachers and home schooling parents share the same silences and misconceptions that were part of their own education—which they, in turn, reproduce in their respective approaches to educating the next generation.

What is common to public school teachers, regardless of their subject area, and to home schooling parents is that both groups rely upon a core vocabulary that cuts across subject areas, and even religions. Both groups also share a misconception about the nature of language. Unfortunately, this misconception contributes to the double bind where ways of thinking that were established before there was an awareness of environmental limits continue to be the basis of thinking today—even as we face the real possibility that major ecosystems will no longer be able to sustain life as we know it. Albert Einstein summed up the nature of the double bind when he observed that we cannot use the same mind set to resolve the problems that this mind set created. Before discussing what professors, public school teachers, and home schooling parents need to understand about how the language they largely take for granted continues to reproduce the misconceptions of the past that are contributing to overshooting the sustaining capacity of natural systems, as well as how they can reframe the meaning of words, it is necessary to review briefly what scientists are now reporting about the scope and rate of environmental degradation.

The ecological crises, which until recently was viewed by a large segment of American society as concocted by extremist scientists and as a threat to local employment, have now gained the attention of over 70 percent of the American public. This growing state of awareness is being further strengthened by the rising cost of fuel and food, as well as by increasing reports of contaminated aquifers, local lakes and rivers. The changes in temperature, which have led to an increase in the number of violent weather systems, droughts, and lack of snowfall, have also raised awareness of the fundamental changes in the world's ecosystems. Many local churches, politicians, educators at various levels of the educational system, and even businesses, have adopted such terms as "green", "sustainability", and "carbon footprint" as part of their vocabulary. Often these terms are used to promote the vary forms of consumerism that are one of the chief contributors to overshooting the sustaining capacity of natural systems. In the case of public school teachers and most university professors, discussions

of environmental issues have not led to recognizing the many ways in which they continue to reinforce the same mind set that co-evolved with the industrial/consumer oriented culture that is overshooting the sustaining capacity of the earth's natural systems. However, the increasing use, and even misuse, of environmentally-oriented language serves to remind the general public that the changes in the environment should be the primary concern today.

Humans have been impacting the environment from the earliest times when the mode of living shifted from a hunter-gather pattern of existence to the early stages of agriculture. It has only been since the rise of the Industrial Revolution in the early 19th century, along with the rapid increase in the world's population (which now stands at over six billion people) in the last century, that the rate of environmental degradation has accelerated to the point where fundamental changes in natural systems have become clearly evident within a person's lifetime. For people dependent upon the permafrost not melting, upon glaciers as sources of water, upon rainfall that slows the process of desertification, on reliable fisheries, upon sources of energy that have a smaller carbon footprint, the ecological crises are an increasing dominant reality that affects their everyday lives. People living in urban areas, where technologies still shield most Americans from many of the environmentally disruptive changes experienced by billions of people living in non-Western countries, are now encountering the early warning signs that the ecosystems that have been taken-for-granted are in a state of rapid decline.

The less visible changes in the world's natural systems will have the most long-term consequences for the prospects of future generations. Unfortunately, the greatest adverse impact will be on the billions of people who are already living in poverty. For example, the hundred and twenty billion metric tons of carbon dioxide that have been absorbed in the world's oceans have now reached the point where they have become thirty percent more acidic, which is leading to fundamental and far reaching changes in the basis of the food chain. Coral reefs that are home to an estimated twenty percent of all marine fish species are dying at an alarming rate, and the changes in ocean temperatures, along with the increased level of acidification, are reducing the ability of the minute marine organisms that the rest of the food chain depends upon to reproduce themselves in the same numbers as before. Another major change that will impact humans is the

increased number of coal fired electrical generating plants that will come on line in the next five years as a result of the global spread of the Western style consumer society. Over the next five years, thirty seven nations plan to add new coal fired plants that will bring the world's total to just under seven and a half thousand. This will increase the amount of CO_2 annual emissions by nine billion tons, which will add to the cycle of global warming already melting the permafrost in the northern latitudes—resulting in the release of methane that has a far greater impact on raising the earth's temperature than other greenhouse gases. This acceleration in the rate of global warming will increase the rate of glacial melting, the further acidification of the world's oceans, and the changes in weather systems that are now causing droughts, changes in the length of the growing season, extinction of species, and so forth.

Changes in the natural systems should not be the only concern of public school teachers and parents home schooling their children. The introduction of computers is leading to basic changes in people's ability to earn a living—which in the past was based on the expectation of life-time employment. With the economic globalization that computers now make possible, work is increasingly being outsourced to regions of the world where the wages and other costs of production are the lowest. At the same time, the use of computers has increased the rate of automation, thus enabling companies to shed workers in favor of machines that do not require health insurance, that are not absent from work, and that do not have to be paid retirement benefits. In effect, the need for workers, except in the service industries that pay low wages, is declining at the same time that the public schools and universities continue to educate students for life in a industrial/consumer dependent culture.

The media continue to reassure Americans that life is getting better, while the overstocked shopping malls reinforce the message that we are living in an age of plenitude—and that excesses of every kind contribute to the growth of the economy. Streets crowded with oversized vehicles that are major sources of carbon dioxide emissions reinforce the message that changes in the environment are of no significance. However, this state of self-deception cannot be sustained. Within our generation, and certainly within the generation of our children, the quality of everyday life will undergo changes that are already being witnessed by increasing numbers of North Americans.

And the impact will be even greater for the billions of people living in South America, Africa, India, and China. Scientists estimate that the tipping point where the rate of global warming can no longer be slowed by changes in human practices is somewhere between ten and fifty years. Unfortunately, most of the attention given to the changes that must be undertaken is focused on adopting more energy efficient technologies that have a smaller carbon footprint, such as sequestering the CO_2 released by coal fired electrical generating plants, and relying upon more wind and solar sources of energy.

Seldom mentioned is the need to reduce the rate of consumerism that has now become an addiction spreading beyond the Western cultures where hyper-consumerism is now equated with meeting life's basic needs. Western television, the Internet, and the other technologies that are being celebrated as creating a seamless, interconnected world, are promoting the same addiction to consumerism at a rate that is further degrading the natural systems. Little thought is given to how equating the spread and expansion in the level of consumerism is affecting the prospects of future generations, or to contributing to the spread of poverty within subsistence cultures that rely upon the renewal of the intergenerational knowledge that sustains the relative self-sufficiency of their cultural commons. Everywhere in the world, becoming dependent upon a money economy is being equated with progress. Aside from the adverse impact on the natural systems which all life depends upon, this view of progress fails to take account of the double bind where dependence upon a money economy is accelerating at the same time that there are fewer and fewer sources of income due to outsourcing, downsizing, and gains in automation. The double bind also includes the drive to expand the economy that depends upon transforming natural resources into products that are briefly used and thrown into landfills that have become massive sites of toxic waste—which are just one of the many contributors to the downward cycle that the Earth's natural systems are undergoing.

For professors, public school teachers, Christians, people of other faiths, the more secularly oriented parents who are concerned with social justice issues, and parents focused on the single issue of taking personal responsibility for ensuring that their children receive the best education possible, the diverging trend lines of an increasing rate of environmental degradation and the spread of poverty within a culture addicted to a state of hyper-consumerism should be a matter of genuine concern. Indeed, if only the

prospects of their children were considered, there should be a similar concern about addressing how to reduce the human impact on the natural systems as well as how to regenerate the traditions of community interdependence and self-sufficiency. And this concern, which can be justified on religious and even by secular social justice values, should lead to a careful consideration of how the current approaches to education in our public schools and universities continue to marginalize an awareness of the alternative pathways to a sustainable future that still exist. These pathways, which are not based on the abstract theories of academics, have a long history and are known as the cultural and environmental commons. What is being recommended here is how public school teachers and home schooling parents can introduce students to the nature and importance of the cultural commons within their communities, as well as to an understanding of how many of the current ideas and values promoted in public schools and universities contribute to a number of myths that underlie the industrial/consumer dependent lifestyle that is becoming increasing problematic.

Before discussing what needs to be included in public school classrooms and in the home schooling curriculum, along with the more traditional subjects, that take account of the need for students to understand the cultural roots of the ecological crises, it is necessary to provide a fuller explanation of the ecological importance of the cultural and environmental commons. Without this understanding students are likely to share the ignorance of most public school and university graduates about the many ways in which the cultural and environmental commons provide alternatives to a consumer-dependent existence. There is also a need to address another shortcoming in the early socialization and formal education of most teachers and parents. Most teachers and parents were reinforced for thinking of language as a sender/receiver process of communication. Unless they understand how language reproduces the misconceptions and silences of earlier generations they are likely to reinforce this sender/receiver view of language. Like other aspects of culture that are taken-for-granted, it is extremely difficult to recognize how language carries forward, even for the most supposedly rational and objective thinkers, ways of thinking from earlier times when there was no awareness of ecological limits.

Both patience and considerable effort will be required in order to recognize the way in which words frame what we are aware of, what will be ignored, and how they reproduce past ways of thinking that are furthering our environmentally destructive behaviors and values. The task of uncovering how so much of our thinking continues to reproduce the misconceptions held hundreds of years ago is made especially difficult by the fact that many of the words that contribute to what I call the "Titanic mind-set" have been elevated to such high status that few individuals are willing to question them. These high-status words and phrases include "individualism", "progress", "modern", "liberal", and "rational thought". Unless professors, public school teachers and parents are willing to make this effort, they will fail to overcome one of the chief weaknesses of a public school and university education-- which is the failure to help students understand how much of the language inherited from Enlightenment thinkers contributes to the further destruction of what remains of the cultural and environmental commons.

The Metaphorical Nature of the Language/Thought Connection

While professors and public school teachers have been under social pressure to recognize how language carries forward past misconceptions about the attributes of woman and other marginalized groups, most home schooling parents initially may wonder why they need to be aware of how language constituted in the past frames today's ways of thinking. Put simply, without a knowledge of how language continues to organize our thinking and values in ways that reflect earlier patterns of thinking, what students learn in classrooms and through home schooling--regardless of whether it is Christian, secular, market liberal, environmentally conservative, or based on developing the artistic talents of students--will largely reproduce these earlier patterns of thinking. In effect, they will be learning to think in the same way that has led to the ecologically unsustainable form of culture that can only be transformed into a sustainable culture through a change of consciousness. Basic to this transformation is a need to be aware of the many ways language influences thinking, what it illuminates and hides, and the cultural values that it reinforces. Like the earlier discussion of the cultural commons, both the classroom teacher's and the parent's understanding of language needs to take account of whether the complexity of daily experiences is accurately represented by

abstract words whose meanings too often do not accurately represent local contexts and what is being communicated face-to-face. Learning about how language carries forward the misconceptions and silences of earlier times may appear as a difficult undertaking, but the effort will turn out to be one of the most important parts of the public school and home schooling curriculum.

Learning how language influences thought and action, and even our values, is necessary if professors, classroom teachers and parents are to provide students with key understandings that they can rely upon over the years to come. That parents are only now being introduced to how language carries forward the interpretative frameworks constituted in the distant past, and are part of the taken-for-granted experience of becoming a member of the language community, is yet another indictment of public schools and universities. The conduit view of language, as a system that conveys ideas and data without altering them in culturally distinct ways, is one of the reasons that the interpretative frameworks from the distant past largely have been ignored at all levels of formal education.

While the following explanation may suggest that there should be a unit of the curriculum that focuses on the metaphorical nature of language, this is would not be a good idea. Rather, after a brief explanation of the nature of metaphorical nature of thinking, including how it too often reproduces the misconceptions of the past, the emphasis should be on raising awareness about how language influences thinking during those teachable moments that arise regardless of what is being studied. There is no communication without language, and as all language relies upon words that were framed by the process of metaphorical thinking, there is a constant need to be aware of how metaphors illuminate, distort, and even deepen understanding.

As this aspect of language is so little understood, the nature of metaphorical thinking needs to be explained in a more systematic manner. Basically this means explaining that metaphorical thinking occurs when trying to understand something new, and in revising a previous way of understanding by using a new development or an already familiar idea from another area of experience as the analogy—such as using the computer as the analogy for understanding the human brain. The initial process of understanding something new is to identify what in previous experience has similar

characteristics, and to use it as the analogy that frames how the new is to be understood. Thus, the new becomes understood "as like" the already familiar. Examples from textbooks include thinking of a forest "as like" a crop of vegetables, family and friends "as like" resources—which are largely understood as something the individual "uses". Other examples of metaphorical thinking include going beyond previous ways of thinking of the brain by thinking of it "as like" a computer. In the early stage of the development of computers, its operating characteristics were understood "as like" human intelligence—which led to labeling computers as "artificial intelligence".

Sometimes the analogy (what serves "as like" another idea or experience that becomes the basis of comparison) has more different characteristics than similarities, such as when a former President compared his economic policies, which were driving the country further into debt, with not changing the game plan in the fourth quarter. In this case, the consequences of a failed economic policy are far more serious than a failed game plan, which quickly recedes in significance as soon as the game is over. In explaining the process of analogic thinking, and in identifying words whose current meaning has been derived from analogies settled on in the past, it is always important to assess whether the differences are more important than similarities. An example of metaphorical thinking based on a profoundly misleading analogy was thinking of the spread of communism in Southeast Asia as having a "domino" effect, where if one domino (country) tipped over into the communist fold the adjacent countries (like dominos) would follow. The way dominos react to a disturbance in their system of organization does not take account of the more important influence of the cultural belief systems of the Southeast Asian cultures that were profoundly incompatible with the cultural assumptions that Marxism was based upon. Yet this misleading analogy led to ignoring the importance of culture in both the spread of communism and in recognizing the sources of resistance to the West's efforts to colonize these countries.

The widely shared meaning of many of our current words, such as "tradition", "progress", "individualism", "environment", "technology", carry forward the analogy that earlier thinkers established as the basis of understanding. As so many of our language patterns are taken-for-granted subsequent generations continued to accept the analogies without question. Thus, we can trace back to the time when Enlightenment

thinkers established the analogies that would continue to give the word "tradition" a negative connotation--such as traditions being identified as impediments to progress, as what protects the privileges of the church, aristocracy, and perpetuates the superstitions of the past. Both Rene Descartes and John Locke made somewhat different arguments about how thinking should not be restrained by traditions; and other metaphors derived by advances in science and technology, such as "progress" and "modernization". The analogy that frames how a word is understood is always limited to a specific aspect of experience and to a specific culture. Too often it may be based on previous analogies that are limited or even inaccurate in what they represent. Thus, the metaphor of "tradition", for example, continues to carry forward a misunderstanding that was framed by the politics and cultural assumptions of the 17th and early 1`8th century in the West. Today, it is widely used in a way that does not take account of the many cultural patterns that people rely upon and that have been carried forward for many years—even hundreds of years. Indeed, the variety of activities, skills, and values that are re-enacted as part of the cultural commons are examples of traditions that do not fit the analogies taken for granted Enlightenment thinkers. In still being under control of this legacy of Enlightenment thinking, many classroom teachers often limit their explanation of traditions to the holidays and other family gatherings.

More recent examples of how the meaning of words is determined by the analogies the reflect the interests and assumptions of powerful individuals and groups can be seen in how scientists were able to establish that a person's intelligence could be determined by her/his score on a test given in the English language. Other analogies could have been chosen for representing how to think about intelligence, such as a person's ability to mentor others, to meet daily needs in ways that take account of the sustaining characteristics of the local ecosystems, and so forth. What should to be emphasized is that words have a history and that they often carry forward the limited ways of understanding, shared assumptions, and the interests of powerful groups of an earlier time. It is also important to explain how the earlier meaning of words, which subsequent generations may not have questioned, was influenced by the prevailing assumptions of the culture. This is important to understand if university, public school, and home schooled students are to recognize that metaphors yhey take-for-granted, such

as "democracy", "individualism", "freedom", "progress", and so forth, may have entirely different meanings in cultures that are based on different stories of creation and different assumptions about the importance of intergenerational knowledge, moral reciprocity within the community and between humans and the natural world. When students become aware of the history of words, including the political forces that influenced which analogies eventually prevailed over competing analogies (which we witness today between scientific and Bible-based accounts of the nature and purpose of humans) then they are more likely to avoid the mistake of assuming that words have a universal meaning.

When this mistake is made, the student adopts a passive and non-reflective relationship to language by assuming that the meaning words is fixed and universally shared. As language is metaphorical (that is, always subject to change depending upon the analogies that are chosen because of more relevant embodied/culturally mediated experiences or chosen in order to give it greater legitimacy by being associated with abstract images and ideas that are not questioned) it should be subjected to constant reinterpretations that reflect the experiences and depth of understanding of each succeeding generation. The metaphorical nature of words requires avoiding the passive acceptance of the experience of earlier generations who have settled on a limited set of analogies. Rather, it requires active reinterpretation of whether the analogy illuminates a fuller understanding—or continues to hide what previous generations were unable or unwilling to recognize. The metaphorical nature of language is always both problematic and at the same time an opening for the individual to search for a more grounded understanding that brings out the connections between the individual's personal story and the social reality that others are dealing with. In short, metaphorical thinking is always open to the process of interpretation and reinterpretation—and is thus an ongoing existential project. It needs to be undertaken not as a subjective (what do I want to think) project. Rather, it needs to reflect a concern for the prospects of current and future generations who will experience the consequences of previous generations who failed to question the guiding metaphors that represented progress as becoming more efficient in exploiting the resources of nature.

There is another aspect of the metaphorical basis of thinking that is an inescapable aspect of the human condition that is also ignored in public schools and in most university classes. The widely held assumption that individual's have original ideas, and that knowledge is free of cultural influences (meaning free of cultural assumptions) needs to be challenged if we are to recognize why the metaphors that carry forward the environmentally destructive patterns of thinking from the past will continue to frame the thinking of the younger generation in ways that will lead them to continue a lifestyle of hyper-consumption that is unsupportable by the Earth's natural systems. If we consider the dominant culture's patterns of thinking, we find that there are certain predictable patterns that occur over a wide range of daily activities, and that can be traced back over many generations—even centuries.

A number of examples come easily to mind. For example, thinking of a human centered world that represents the environment only as an economic resource, thinking of men as having greater skill, being more rational, and stronger than women (a belief now changing in some sectors of society), thinking of organic processes as having the characteristics of a machine (e.g. the brain is like a computer, the heart is like a pump, the industrial type processes that sustain a plant cell, and so forth), thinking of all forms of change (especially technological change) as the expression of progress, and thinking of the individual as the source of ideas and values—and becoming increasingly autonomous, are evidence of shared and largely hidden linguistic processes that organize both how we think and the values we hold. Each of the above examples are evidence of what can be called "root metaphors" that were constituted centuries ago. Patriarchy and the idea of a human-centered world (referred to as "anthropocentrism") go back at least to the Book of Genesis, and the root metaphors of mechanism and individualism can be traced back to just before the rise of modern science—though some scholars argue that the idea of the autonomous individual has its origins in the Bible.

The important point is that root metaphors organize (or frame) our thinking in ways that we are not usually aware of-- such as taking-for-granted that new technologies, regardless of the traditions they undermine (such as how robots make redundant the skills of workers, and computer networks enable governments to create a culture of constant surveillance), as expressions of progress. Indeed, this largely hidden interpretative

framework leads most people to ignore asking the question: What important traditions are being undermined by the supposedly progressive nature of change? Root metaphors not only organize our patterns of thinking by illuminating those aspects of experience that are conceptually and morally coherent with the root metaphor; they also marginalize or eliminate awareness of those aspects of experience that do not fit the root metaphor's interpretative framework. For example, the root metaphor of individualism not only justifies private property—including the ownership of ideas, it also represents the individual as having a unique perspective on an external world, and as the source of values. At the same time, it reduces awareness of how the constantly shifting relationships with others and the environment undermines the assumption about being an autonomous, self-directing being. If individuals were autonomous they would beunable to communicate with others as no-one else would share their special language—and they would be unaffected by what others communicate to them. To reiterate a key point: root metaphors both illuminate and hide simultaneously. They also guide, largely at a taken for granted level of awareness, the selection of analogies—ensuring the conceptual coherence between the new analogy and the root metaphor.

While root metaphors are largely taken for granted, as in the case of patriarchy and anthropocentrism, they can be challenged—and thus undergo change. For example, the anthropocentric view of human/nature relationships is being challenged by the emergence of what is becoming the new root metaphor of "ecology". While this interpretative framework currently relies more upon the sciences, ecology is beginning to be understood as a way of recognizing how individuals are nested the symbolic world we call culture, and cultures are nested in natural systems. This expanded understanding of the word ecology is leading, in turn, to challenging the root metaphors of a mechanistic world, individualism, the linear view of change as being inherently progressive, and so forth. The root metaphor of ecology, which can be traced back to the ancient Greeks (but new to our times), has been a taken-for-granted interpretative framework that continues to inform the ways of thinking and values of many of the world's indigenous cultures. Another emerging root metaphor that has legitimate explanatory power in the areas of the empirical sciences, but is being extended in ways that supposedly explain how cultures change, is "evolution". The people who promote evolution as a total explanatory

framework are committing the same error as the people who reinforce other ecologically problematic root metaphors: namely, they ignore the limitations, even destructive effects of explaining how cultural patterns and values are subject to the same processes of natural selection.

Just as the earlier discussion of the nature and ecological importance of the cultural and environmental commons may have appeared as initially difficult to understand, the discussion of how the layered nature of metaphorical thinking (where root metaphors influence the analogies that frame the meaning of words) may have been similarly challenging. Giving close attention to human activities and relationships within the local community should help to transform what may have appeared initially as abstract and largely irrelevant into what can be understood as part of the embodied/cultural experiences of daily life. Similarly, giving close attention to patterns of thinking in the media, printed materials (including educational software), and daily conversations, will make it easier to recognize how words carry forward over many generations analogs that fail to take account of many aspects of daily experience—including how the "as like" association of words such as "tradition", "technology", "freedom", "patriotism", "American", foreground certain images while excluding other possibilities that may be more important. Thinking of technology as a tool marginalizes, as pointed out earlier, how different technologies amplify and reduce awareness of different aspects of human experience; while thinking of patriotism as the unquestioning support of war tends to represent any consideration of the moral issues as being unpatriotic.

Encountering the explanations about the cultural commons and the metaphorical nature of the language/thought/cultural connections would have been made much easier if both had been part of the parent's public school and university education. Unless home schooling parents make the effort to connect the above explanations with examples that are part of daily experience, and introduce students to these vital areas of understanding, they will end up the same educational deficiencies as the students who graduate from the public schools and universities. And it is only as professors and public school teachers enable students to become aware of how words carry forward the misconceptions of the past that this cycle can be broken. Given the rate at which the environment is undergoing

changes that will have an adverse impact on the lives of today's children and young adults, including increased costs, scarcities, health problems, being pulled into and dying in wars over resources that lie ahead, and so forth, the excuse that it is too difficult to learn about the community-centered alternatives to the current levels of hyper consumerism and about how language influences awareness and ways of thinking just does not stand up.

Parental responsibility, whether grounded in a religious faith, a secular based social justice perspective, or as concerned parents who wants the best for their children, cannot avoid the short and long term consequences of global warming and the other changes that are undermining the ability of natural systems to sustain life. Nor can professors and classroom teachers avoid the long-term consequences. Now that many churches are beginning to embrace the Biblical injunctions that humans must not destroy God's creation, we may find that members of these churches will be able to avoid the relativism that characterizes what is being learned in many public schools and universities about how to address the ecological crises—which is mostly to seek technological solutions and to reinforce the liberal idea that each faculty member and student must find within themselves the reasons for taking the environmental crises seriously.

Ironically, while some public school teaches and university professors are beginning to include environmental readings in their classes, they lack the conceptual framework of the Social Gospels that gives moral legitimacy to regenerating the cultural and environmental commons. It is unlikely that public schools and universities will address the deep cultural roots of the ecological crises as they continue to be caught in the double bind of promoting technological solutions to the ecological crises, while at the same time reinforcing the root metaphors of individualism, the progressive nature of change, the cultural neutrality of technology, and evolution as a way of understanding which cultures will meet the test of Darwinian fitness. A minority of graduates will be working to reduce the carbon foot-print of current technologies and to restore habitats, while the majority will continue to equate success and personal happiness with advancing to the higher levels of the consumer pyramid that include the three car garage and the huge SUV. If home schooling parents are to avoid this double bind, which may be

expressed in their efforts to recycle and working to restore local habitats--while at the same time leaving their children subject to the consumer lifestyle promoted by the metaphorical language of previous generations-- they will need to break the silences about the importance of the cultural commons and the ways in which language continues to influence thought and behaviors. The same holds for professors and public school teachers.

Bringing a New Level of Intelligence to the Teachable Moments

A different approach must be taken in public schools and universities if students are to enter the adult world knowing how the language they and others rely upon reproduces ways of thinking that further accelerate the rate of environmental degradation. In these institutions, the dominant approach is to teach a certain body of knowledge as a unit. This may take the form of reading and discussing a specific historical event, ideas of a particular thinker, and so on. The units of knowledge often share commonalities with other units of knowledge that make up a course, such as learning about philosophers within a specific tradition of thinking, the events leading up to a war, various research on gender and social class issues, geological formations of the Southwest, and so forth.. The focus is on learning a certain body of knowledge, with little attention given to the root metaphors that framed the thinking of the early participants in the events or the current interpretations of the event's significance. Admittedly, the curricula of public schools and universities are more complicated than I have represented them here. The point that needs to be emphasized, however, is that the metaphorical nature of language influences thinking is seldom given attention.

With the exception of courses in folklore and the sociology of community, little or no attention is given to the nature and ecological importance of the cultural commons. As the home and surrounding community are less dependent upon the print-based abstract knowledge promoted in many university and public school classrooms, home schooling parents may be more receptive to incorporating different aspects of the cultural commons into the curriculum. Face to face interactions with people in the community engaged in cultural commons activities means that the home schooled student is learning how to participate in the cultural commons. On the other hand, the student who is dependent upon classroom conversations, computer searches and software programs, and

books, is encountering the cultural commons, if at all, at an abstract and largely out of context level. Indeed, it is unlikely that public school teachers, given the silences in their own education, would provide students with the language necessary for recognizing the differences between the cultural commons-based experiences they largely take for granted and the market-oriented cultural experiences that they also take for granted.

Many aspects of a home schooling education will replicate the curriculum units of the public school--in geography, history, various sciences, mathematics, literature, and so on. Parents with a strong religious orientation may rely upon curriculum materials that support their particular religious tradition. In spite of what are often significant differences in how subjects are interpreted, that fact remains that these diverse curricula rely upon the use of language that carries forward many of the metaphors formed in the past that are destructive to the mutually supportive activities of the cultural commons and the Earth's ecosystems. In the less structure subject areas, home schooling can be very fluid, such as when the student is being mentored by one of the artists in the community, and when a wide range of experiences with people engaged as volunteers, librarians, gardeners, local storytellers, and so forth. Home schooling that introduces students to how other members of the community are participating in the cultural commons (which is likely to be referred to as "community" rather than the "cultural commons"), and which have many of the characteristics of place-based education, is not likely to include extended discussions of how language influences thought and behaviors.

Issues relating to language and to the nature of the cultural commons (including the different forces that are enclosing the cultural commons) should not be introduced as a separate curriculum unit, such as a unit on a certain period in American history or a unit on world geography. Rather, these issues should be introduced in every subject area, and in every experience that students have in the community and with the life supporting natural systems. For examples, instead of the unconscious patterns of constantly reinforcing the idea of individualism as evidenced in such questions as "What do you think?" and What are you experiencing?" and so on, --or the idea that all changes are inherently progressive in nature. The metaphors of "you" and "I" reinforce the cultural assumption that thinking and awareness are attributes of the autonomous individual who is uninfluenced by the largely taken-for-granted linguistic traditions of the cultural

ecology that she/her is nested in. And reinforcing the cultural assumption that change is always the expression of progress leads to ignoring considering what is being lost that is important to sustainable communities and ecosystems.

Helping students to recognize how the analogies established in the past are still carried forward in the current use of words is only half of the challenge facing both class room teachers and home schooling parents. If students are going to acquire an ecologically sustainable form of consciousness they will need to participate in process of replacing the old and misleading analogies with analogies that more accurately represent the different ways they are dependent upon the self-renewing characteristics of the cultural and environmental commons. . The following suggestions for associating words with more current and ecologically informed analogies can easily be achieved. A current example of what is being suggested can be seen in how the historically grounded analogies for understanding the attributes of a "woman" have been rejected—and replaced among certain segments of society with new analogies. The old analogies included thinking of women "as like" highly emotional, non-rational, and dependent upon men. These culturally prescribed attributes led to restricting the development of their talents and interests to that of being a mother and house keeper, school teacher, a nurse—and certainly not that of scientists, artists, doctor, a worker in one of the construction trades, and so on. The latter are now the analogies that many members of society now take for granted.   The process of identifying new analogies that will give words meanings that reflect current values and experiences requires the exercise of intelligence and commitment in overcoming the tendency to take the easy way out by accepting and reinforcing the formulaic thinking of others. Avoiding the old patterns of formulaic thinking will be especially required in understanding how "ecology" needs to replace the old root metaphors of mechanism, individualism, progress, anthropocentrism, patriarchy, and economism (the latter being the assumption that everything should be judged in terms of its market value).

The contemporary use of the word, ecology, is derived from the early Greeks who coined the word "oikos" which was their metaphor for referring to the relationships and interdependencies of the family household, including its daily operations and maintenance. The word underwent a number of transformations, including the addition of

the suffix "ology", which reframed the meaning to be the scientific study of how natural systems operate. More recently, the explanatory power of the word has been extended to how cultures can be understood as interdependent and self-managing systems. Gregory Bateson has expanded the meaning of ecology to include the role of language in sustaining relationships as interdependent cognitive systems. As Bateson explains in Steps to an Ecology of Mind (1972):

> The total self-corrective unit which processes information, or as I say, 'thinks' and 'acts' and 'decides', is a system whose boundaries do not at all coincide with the boundaries either of the body or what is popularly called 'self' or 'consciousness'; and it is important to notice that these are multiple differences between the thinking system and the 'self' as popularly conceived". (p. 319)

In effect, Bateson's understanding of an ecology also includes how the root metaphors and analogs that frame the current use of image words that were constituted in the distant past continue to influence how we think today. The world, according to this way of understanding the interconnections between cultures and natural systems, is not made up of isolated events and individual actions, but rather as a network of relationships and interdependent processes that were not understood by the older generations whose thought processes are still taken-for-granted by most people—including many of our supposedly most brilliant thinkers.

There is another statement by Bateson that professors, classroom teachers, and home schooling parents should keep in mind as their students study the various subjects and accept in too many instances the authority of the printed word whose authorship is often unknowable. A key understanding of Bateson is that all living entities respond to differences being communicated through the local and, subsequently, the entire ecosystem. He further understood these differences as bits of information that make a difference in the behavior of nearby organisms. The poet and essayist, Gary Snyder, explains how information (what Bateson refers to as a "difference which makes a difference", is passed along as we and other organisms interact in the everyday world:

> The world is watching: one cannot walk through a meadow or forest without a ripple of report spreading out from one's passage. The thrush darts back, the jay squalls, a beetle scuttles under the grasses, and the signal is passed along. Every

creature knows when a hawk is cruising or a human strolling. The information passed through the system is intelligence" <u>The Practice of the Wild</u>, 1990, p. 19.

It is only as the next generations are able to make the transition to basing their thinking, values, and behaviors on root metaphors that do not represent humans as possessing the right and ability to control and exploit nature systems that there is a possibility of slowing the rate of environmental degradation that previous generations set in motion. Understanding that humans must not destroy God's creation may represent such a shift in thinking. For secularly oriented parents and teachers, it will be necessary to educate students to think of how their lives are made less secure and fulfilling by being increasingly dependent upon an industrial system of production and consumption—which provides convenience at the cost of developing personal skill and engaging in mutually supportive relationships.

Curriculum Guide # One: **How to Replace the Root Metaphors that have been Major Contributors to the Ecological Crises We Now Face**: It is important to be constantly alert to how explanations and descriptions in curriculum materials and conversations are based on the root metaphors of patriarchy, anthropocentrism (a human-centered view of nature), mechanism, change as progressive, autonomous individualism, and economism. There should be a constant effort to bring into discussions the root metaphor of ecology, which foregrounds relationships and interdependencies—including Bateson's insight that in sustainable ecosystems no part, including humans, can have unilateral control over the whole. The growing awareness within various Christian and other religious communities that humans have the responsibility of "stewardship" of God's creation relies upon a different source of legitimation,but achieves essentially the same end: namely, that individual greed, willfulness, and other expressions of hubris are not to replace the moral responsibility of humans for maintaining the well-being of the creative process that, in a different metaphorical language, is understood as the ecosystems we are part of—and which Bateson referred to as Mind.

Curriculum Guide #2 How to Change the Analogs in Ways that Make the Use of Words More Accountable and Relevant to Achieving Ecologically Sustainable Cultures:

What continues to dumb-down our ways of thinking and behaviors in ways that perpetuate the same cultural patterns that existed before the warnings of scientists about the accelerating the rate of global warming is the way we continue to rely upon the analogies that represent what may have been understood as the progressive expression of intelligence centuries ago. To reiterate several key points: these early analogs, which continue to frame how we understand such image words as "individualism", "technology", "community", "freedom", "free trade", "property", "development", and so on, while representing an advance over previous ways of thinking, were influenced by the prevailing root metaphors of that era. Furthermore, these root metaphors, as well as the image words that were influenced by them, did not take account of cultural differences in ways of knowing, the nature and importance of the local cultural commons, and that the continual exploitation of natural systems could lead to what Jared Diamond has documented as the "collapse" of ecosystems and of the cultures that exploited them.

Both classroom teachers and home schooling parents must choose between reinforcing the language that carries forward the misconceptions of the past, or helping students identify and use more currently accurate analogies. This may seem especially daunting as their own public school and university education failed to prepare them for this. There is another problem that lies beyond the control of classroom teachers and parents, and it has to do with whether the rest of society continues to use language in ways that reproduces the past misunderstandings and silences. Taken-for-granted patterns of thinking and communicating are difficult to recognize, and for this reason are especially difficult to change. But changing the analogies that inform how we understanding the meaning of words is possible, as we can see in how such words as "woman", "wilderness", "conservation", and so forth have taken on new meanings by being associated with analogies that reflect more accurately today's experiences. The use of new analogies, in turn, leads more people to become aware of what they previously took for granted.

There are also new analogies have further limit understanding, such as thinking of the brain as like a computer, national security as requiring the loss of privacy and habeas corpus, economic globalization as the latest expression of progress, free trade as the core belief of conservatives (when it is a core belief of market liberals), and so forth. The

point is that new analogies are continually being used to update how words are to be understood. But a problem arises when the new analogs are influenced by the root metaphors (the broad interpretative frameworks formed centuries ago that continue to underlie current patterns of thinking). These observations are not meant to discourage classroom teachers and home schooling parents. Rather they are intended to clarify why contributing to a more ecologically sustainable language must be part of a larger movement that will meet many forms of resistance.

Key Understandings that Should Guide the Process of Identifying More Currently Accurate and Ecologically Accountable Analogies:

- *Words that appear in print foster abstract thinking, and thus often fail to take account of local contexts shared by members of the cultural group, and the multiple dimensions of the students embodied experiences—which are always situated in a specific physical and cultural context, networks of tacit understandings, and framed by the student's memory of past experiences and current patterns of understanding.*
  Classroom teachers and home schooling parents need to promote an examination of the differences between what the abstract word fosters an awareness of and the layers and multiple dimensions of the student's immediate experience. Gregory Bateson's statement that the map (words as metaphors) are not the territory (do not bring to awareness all of the characteristics of the territory) may be useful here in understanding the gulf that exists between words that carry forward the limited understanding of previous thinkers and the need for students to identify the words (metaphors) that best express what their experience encompasses.

- *Words that appear in print also communicate another message—namely, that words have one meaning and that this meaning is universally shared.*
  Special attention needs to be given this characteristic of the printed word. If it is ignored, students may assume that words, such as individualism, freedom, success, and so forth, may have the same meaning in other cultures. One of the effects of relying upon the abstractions of the printed word is that it contributes to the process of colonizing other cultures—often motivated by good intentions but

also reflecting ignorance that the other culture's way of knowing may be based on profoundly different root metaphors and mythopoetic narratives. Classroom teachers and parents need to be constantly alert as to when it is important to point out that words may have different meanings for people in other cultures.

- *How what Clifford Geertz referred to as "think description" provides the basis for identifying more accurate and ecologically informed analogies for reconstituting the meaning of words.* The best and shortest way to describe what Geertz meant by "thick description" is to use the examples he gives for determining the differences between an involuntary wink and one that is intended to send a message. Unlike the voluntary wink, the involuntary wink is not intended to send a social message. Thus, the focus of thick description is on the previous experiences between the person who intends the wink to send a specific message and the person who acknowledges it, misinterprets what it is intended to convey, or ignores it because of cultural differences in how non-verbal messages are understood. Thick description also takes account of the immediate context, and the cultural norms governing different forms of non-verbal communication. In short, thick description provides giving an account of the complexity of the individual's embodied experience—which includes the cultural norms that influence relationships, bodily sensations, memory, emotions, intentionality, explicit understandings and expectations, and the taken-for-granted dimensions of awareness that may be made explicit by the experience. It brings to awareness the complexity of the individual's embodied, conceptual, and taken-for-granted world that is marginalized by relying on the abstract representations of the printed word. The differences between the printed word and the spoken word, which requires a greater sensitivity to what thick descriptions brings to awareness, does not mean that the printed word should be abolished. It has many useful, indeed, essential purposes. The problem is knowing the differences between the spoken and printed word, and when it is most appropriate to rely upon each. A discussion of these differences should be part of the educational process in public schools and in home schooling.

- *What is being referred to as "embodied experience" should not be interpreted to mean the student's subjective experience.* The idea that individuals have their own subjective experiences is a concept that has its origins in the root metaphor of individualism, which has itself undergone a number of changes over the last thousand or so years of Western experience. The idea that certain individuals can know a reality that is uninfluenced by cultural traditions goes back to Plato. The idea of the autonomous individual who looks out upon the world and thinks about it as though she/he is separate was further strengthened by Rene Descartes and later by John Locke who, for different reasons, argued that ideas should not be influenced by the traditions of the culture. In more recent years, the idea that there is such a thing as subjective experience has been reinforced by modern notions of creativity, and by various theories of learning now being promoted in public schools that the students' subjective knowledge should be what guides them. What is now called "digital learning", which is being used to justify more of the educational process being mediated through computers, also is based on the idea that the subjectivity of the student is the most powerful and legitimate approach to knowledge.

   Whenever there is a reference in the curriculum or in conversations that there is such a thing as a subjective experience, it is important to keep in mind the previous discussions of how language serves as the basis of both explicit and taken-for-granted ways of thinking and communicating. Without this culturally derived language, which also includes the non-verbal patterns of communication, the individual would be living in a genuinely subjective world—but it would be an isolated life that would not have any meaning as communication with others would be impossible. Pedagogically, classroom teaches and parents need to present the cultural evidence of how the student individualizes the cultural patterns of thinking while at the same time reproduces many of its taken-for-granted patterns of thinking and value judgments (including the idea of individual subjectivity), as well as the patterns of non-verbal communication. The point to be emphasized is that individuals give individualized expression to many of the cultural patterns that are shared—some of which reflect the ability to think

critically about what others take-for-granted, to re-conceptualize and to imagine innovative ways of representing cultural patterns, and to interpret different aspects of experience in ways that reflect more their own history of embodied/culturally mediated experiences.

- *The need is to continually bring to the attention of the student that words have a history, and that they carry forward culturally specific assumptions and analogs.* The reasons why this insight should be a common feature of public and home schooling has been discussed earlier. But it needs to be part of the check list of what the classroom and home schooling parents need to remember. When it becomes as natural as water is to fish, then it can be dropped from the checklist. Pointing out that words and assumptions have a history in earlier stages in the development of the culture should be followed by encouraging   students to investigate the early history of words and root metaphors, including how the analogs that framed what words are supposed to represent and mean has changed over time. Words such as creativity, individualism, technology, progress, and intelligence have undergone many changes over the last two or so thousand years. Recognizing the nature of the changes will help free the student from the false idea that words represent an objective and unchanging reality—and that they can participate in the process of initiating new changes that contribute to a more sustainable future.

- *Lastly, it needs to be kept in mind that the effort to identify more ecologically and culturally informed analogies for key words in the English vocabulary does not take into account how words in other language are framed by the root metaphors and mythopoetic narratives of other cultures.* In short, what follows is an admittedly ethnocentric reframing of key words in the English language—thus caution should not be used as a basis of direct translation into other languages.

How to Identify More Accurate and Ecologically Informed Analogs for Key Words in Today's Vocabulary.

Intelligence:

Historical and current misconceptions: Intelligence was and continues to be considered as an attribute of the autonomous individual. Earlier ways of thinking

represented intelligence as an attribute given by the Creator (thus giving the individual special rights and privileges), as what separates literate people from people "stuck" in oral traditions, as demonstrated by the ability to do well on an English language test, as an inherent potential that individual experience will bring forth, and as the outcome of genetic inheritance. The many shortcomings of these views of intelligence include how social class, racial, and gender forms of discrimination limited the different ways in which intelligence develops both in a biological and cultural sense. What is most often overlooked by critics of these many views of intelligence is that the language community that one is borne into is a critical factor in the limitation or development of intelligence. As pointed out earlier, if the analogies that frame the current ways of understanding the meaning of words were constituted by earlier generations that had a limited understanding based on the misconceptions of the generations that preceded them, then today's expressions of intelligence will reproduce the earlier misconceptions. When this occurs, language can limit the expression of intelligence.

Analogies that more accurately represent the nature of intelligence: Students should be encouraged to identify different experiences that involve the expression of intelligence. These experiences may range from recognizing relationships in social and other situations where the next step forward requires thinking of a response that does not create new problems and uncertainties. The situations may vary from how to greet a guest from a foreign country whose non-verbal patterns of communication are different from what the student takes for granted, to how to make sense of whether the weather patterns and soil conditions are right for the planting of seeds. Examples of being able to make an intelligent response to various relationships in the social and natural worlds can serve as analogs that give the metaphor of intelligence a more culturally and ecologically appropriate meaning. The ability to recognize inappropriate and destructive responses in various situations is also the expression of intelligence. In effect, intelligence should be understood as a verb—that is, what guides an action.

There are also expressions of intelligence and unintelligence that are also part of the student's embodied experiences. These can be referred to as tacit forms

of intelligence-- such as how, as an infant, the student learned to speak and think in the metaphorical language of her/his linguistic community. Learning the cultural patterns of non-verbal communication is another example of tacit intelligence. The language that carries forward the intergenerational knowledge of how to live in a sustainable relationship with the local environment, as well as how to engage in mutually supportive activities with other members of the community, also involves complex forms of tacit learning. Behaviors and patterns of thinking that threaten both the environment and the mutually support systems of community thus become expressions of a lack of intelligence. Tacit forms of intelligence and unintelligence must be assessed in terms of the impact on personal development, and whether they strengthen or undermine the cultural and environmental commons.

Intelligence is also expressed in the ability to make explicit taken-for-granted beliefs and practices that are morally problematic, environmentally destructive, and limiting of the individual's own personal development. It may involve being able to think critically, which may lead to recognizing what needs to be conserved.

In order to connect a more complex and culturally grounded understanding of intelligence with the student's experience, have them keep track over a short period of time the different behaviors and choices that reflect examples of intelligent and unintelligent responses and behaviors. Also, have the student identify the metaphorical language that carries forward what may have been the expression of intelligence in the distant past, but that now leads to unintelligent ways of thinking and behaving. This exercise will help the student understand that language, as well as the thought patterns given expression in the built culture such as bridges, buildings, layout of cities, etc., are also expressions of intelligence and unintelligence. These examples should lead to analogies that represent intelligence as relational, culturally influenced, and judged, in the final analysis, on its moral implications for contributing to sustainable communities and ecosystems. When understood as a verb, rather than as an attribute of the individual's test taking ability, genetic inheritance, and of gender differences, the analogies for a more

accurate way of thinking about intelligence will be largely derived through the process of thick description of embodied/cultural experiences in the different environments that are part of daily life.

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For older students, the following books will provide an understanding of how different cultures foster forms of intelligence that are different from our emphasis on an individualistic and technologically-oriented form of intelligence: Sean Kane, The Wisdom of the Mythtellers (1994); Keith Basso, Wisdom Sits in Places: Landscape and Language Among the Western Apache (1996). A book that provides an account of how different cultures relied upon forms of intelligence that were not informed by a knowledge of local ecosystems is Jared Diamonds, Collapse: How Societies Choose to Fail or Succeed (2005).

Technology:

*Historical and current misconceptions***:** The early Greek philosophers articulated the distinction that still influences the ways in which technology is understood today. That is, they made the distinction between theory and practice, with theory representing the higher realm of thought, while practice represented the low status activities—which included the use of techniques that were thought of as repetitious physical activities that did not require the use of the higher faculties (i.e., the mind). This prejudice toward technology still continues today, and can be seen in how the study of technology has been largely relegated to technical institutes and the more low-status forms of higher education. As it has only been recently that different forms of technology have been studied, the idea that technology is only a tool goes well back in Western history.

Unfortunately, this image of technology as a neutral tool still prevails. The result is that when references are made to technology the focus is usually on motives and skills of the person or group using the "tool" –which leads to ignoring how different technologies influence human experience. The connection between technological innovations and social progress, which has its root in the rise of Western science and the Industrial Revolution has further contributed to ignoring the need to question thinking of technology "as like" a culturally neutral tool.

*Analogies that more accurately represent the nature of technology***:** Anyone who has interacted with a computer, a cell phone, a hammer, or any other technology should be aware, if they pay attention to their embodied experience rather then rely upon how they have been taught to think about a technology, that every form of technology has a different influence on their bodily experiences, ways of thinking, and how they relate to others and the environment.

Don Idhe, a philosophy of technology, identified three ways in which we experience technology—and educators should use the teachable moments to have the student give a descriptive account of how she/he experiences the three ways they encounter different technologies. Again, the new and more complex analogies that will radically reframe what technology encompasses (that is, "is like") include the following. **Technology as background:** Have the student describe how different technologies (e.g., electricity, furnaces, motors, cars, airplanes, paved streets, surveillance cameras, bar codes, and so forth, operate in the background of everyday experience. Specifically, have them identify how sound, temperature, and sight, are influenced by technologies. Also have them identify the hidden influences of technologies, such as how surveillance cameras, bar codes, and messages transmitted through cyberspace may put in jeopardy their civil liberties. This should be followed by a discussion of what the student thinks are the appropriate and inappropriate uses of the latter technologies. A key point here should be to help the student gain a fuller and more explicit understanding of just how much of daily experience is influenced by the use of different technologies—and how little discussion there is about their positive and destructive effects. Another activity would be to have the student place herself/himself in different social and environmental contexts (walking down a street, in a supermarket, in the woods, in a library, and so forth) and have them describe what they are aware of that is not a technology and what is not influenced by a technology.

Technologies we manipulate: Experiences with this aspect of technology include turning switches on and off, manipulating the devices that control all the functions of a car, bicycle, boat, power point presentations, computer, etc..

Manipulating tools used in repairing a car, in the hospital, constructing a building, preparing a meal, and so forth also need to be considered if the student is to obtain a more accurate understanding of just how dependent we have become on technologies. If the issue that should be discussed is how automation is undermining the importance of craft knowledge that has been refined and passed along over many generations. This discussion, in turn, could lead to considering whether the automated tool, such as a bread making machine, a robot used in a manufacturing process, and a power loom, has an affect on the worker's sense of pride in perfecting a skill and exercising aesthetic judgment. There are also questions about whether the technology requires different forms of energy that have a greater environmental impact than when personal skill is relied upon.

Mediating characteristics of technologies: Understanding this aspect of technology, according to Idhe, overturns the myth that technology is a neutral tool, and that humans may use this tool in either constructive or destructive ways. The key word here is "mediates" in that it brings out the need to consider how the specific characteristics of a technology alter human experience—including human relationships, what can be thought and communicated, and what will be marginalized or silenced. Idhe suggests that the words "amplifies" and "reduces" be used in identifying the mediating characteristics of different technologies—ranging from a computer, cell phone, power loom, to a tractor pulling a set of plows, a bicycle, a car, and so forth.

Idhe uses the example of a person standing in an orchard who uses a stick (as a tool or simple technology) to reach the fruit in the upper branches. As he points out, the nature of the stick amplifies the individual's reach. At the same time, the characteristics of the stick reduces the possibility of experiencing through touch and smell whether the fruit should be dislodged. This is a very simple example, yet it brings out the essential point, which is that the characteristics of the technology are what determine, in large part, how it will be used—and it is the characteristics of the technology that amplify and reduce aspects of human experience. To take a more complex example that students can easily understand, have the student think of how the use of a cell phone mediates her/his experience (embodied, cultural

norms governing relationships, tacit understandings, memory, silences, etc.). That is, what aspects of experience are enhanced (amplified) and what aspects of experience that are part of face-to-face communication are reduced or eliminated entirely.

The same questions can be asked about the mediating characteristics of the printed word, the use of computers, the differences between riding in a car or walking, and so forth. In order to focus on how the characteristics of a technology influence the mediation of human experiences, including relationships and thinking, it is important to start with a description of what the technology enables the individual to do—such as communicating voice over vast distances. This should be followed by a description of what aspects of human experience are limited or negated by the characteristics of the technology, such as eliminating the non-verbal forms of communication, awareness of context, and so forth. As different technologies are considered in terms of their mediating characteristics, the discussion should move on to engage even more important issues, such as the impact of the mediating and reduction characteristics on the traditions of other cultures, which might lead to considering if the use of cell phones and computers foster a sense of individualism and the idea that, for autonomous individuals, intergenerational knowledge becomes irrelevant to meeting immediate needs and interests. Questions about the mediating characteristics of technologies should be raised concerning their impact on natural systems. For example, how do different technologies, such as a modern tractor and a horse drawn plow impact the soil and thus the fertility of the soil? What is the environmental footprint of the internal combustion engine and the jet engine? What are the disruptive effects connected with relying upon seeds that are genetically engineered to resist pesticides? In assessing the amplification and reduction characteristics of technologies on natural systems, questions can also be raised about how the nature of these technologies alter human experience, relationships with others—and how they contribute to the loss of traditional knowledge of how to live more lightly on the land.

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Older students should be encouraged to read the first chapter of Jacques Ellul' s classic, <u>The Technological Society</u> (1964); E. F. Schumacher<u>, Small is Beautiful</u> (especially the section on intermediate technology) (1973); R. C. Lewontin, <u>Biology as Ideology</u> 1992); Walter Ong<u>, Orality and Literacy: The Technologizing of the Word </u>(1982)—especially chapter 4. C. A. Bowers, <u>Let Them Eat Data</u> (2000). Younger students should focus on how interacting with different technologies alters bodily experiences, patterns of thinking, relationships with others, and with the environment.

Tradition

Historical and current misconceptions: The religions of the world have had a powerful influence on how the word "tradition" has been understood. As religions are based on stories of origins, they have oriented human consciousness toward the past and, depending upon the basic stories of how life should be lived, toward the future. In oral cultures where survival of the individual and community are critical concerns, reliance on traditional knowledge, values, and technologies that have been tested over time is a taken-for-granted form of wisdom. In the West, with the rise of modern science, the emphasis on the importance of rational thought, and the experimental approach to developing technologies, the word "tradition" became associated with social groups and institutions that resisted these forces as they became increasingly associated with "progress". The result is that today this Enlightenment view of tradition is still reinforced in public schools and universities. In effect, for many university educated people, today's analogies for framing how tradition is understood are the analogies of the early Enlightenment thinkers—augmented by the continual stream of scientific advances, technological innovations, and the many voices calling for further progress and change.

What Edward Shils refers to as this "anti-tradition tradition" has led to marginalizing the study of the nature and complexity of tradition—with the result that few students graduate with an awareness of how different technologies, belief systems, and other forms of modernization undermine traditions that enable

people to be more self sufficient as individuals and communities. A more complex understanding of traditions is also needed if students are going to understand the ecological importance of renewing the cultural commons and carrying forward the traditions of seeking to expand the gains made in the areas of social justice. A complex knowledge of traditions, ours as well as the traditions of other cultures, is essential to avoiding a form of consciousness that accepts cultural amnesia as a normal condition, and thus is more vulnerable to different forms of totalitarianism promoted by a combination of belief systems, technologies, and economic forces.

Analogies that more accurately represent the nature of tradition: Younger students can be introduced to the complex nature of tradition by the simple act of naming different aspects daily experience that are examples of tradition. In effect, this connects the word tradition "as like" reading from left to right, the spelling of words, not taking things from others without permission, not using abusive language, wearing certain styles of clothes, voting for people who represent our interests, preparation of food, ways in which stories are told, concern about the well-being others, and so forth. This process of naming different cultural practices, including ways of thinking, as examples of traditions should also include naming practices harmful to others and to the environment. These would include racist comments, taken-for-granted assumptions about some groups having less ability than others and thus undeserving of equal opportunity, practices that are meant as sources of fun but destroy local plants and animals, use of language that represent humans as owning the environment and the world being an economic resource. This list could be extended indefinitely, but the important point is that naming morally and ecologically destructive practices as also being examples of tradition, is the starting place for an ongoing conversation about the need to examine different traditions in terms of whether they contribute to the requirements of the Social Gospel, what is taken to be social justice in today's world, and to an ecologically sustainable future. Naming these different examples of daily practices as the expressions of tradition will also provide the basis for later discussions about whether traditions that began in the distant past

should be carried forward, as well as discussion about traditions that are important to the well-being of community that are on the verge of disappearing.

As students become older and develop the ability to discuss the connections between relationships that are not directly experienced (theory) and their everyday world, it would then be important to begin a discussion of the different characteristics of traditions. These understandings (concepts) are also based on metaphorical thinking where thinking about traditions "as like" different aspects of experience come into play. One of these concepts, which was suggested by Edward Shils, is thinking of traditions, not as an obstacle to progress and as a source of backwardness, but "as like" a plant. This analogy foregrounds the organic rather than static nature of traditions. Like the roots of a plant, traditions are deeply rooted in the past—with many of them dying while new roots are in various stages of formation. Similarly, the branches, like the traditions we are aware of, are also in various stages of development—with some withering and disappearing completely while others are strengthening and growing more robustly.

There are also other concepts that are essential for older students to consider, such as the idea that some traditions should not have been started in the first place—and certainly should not be perpetuated given today's understanding of moral reciprocity, social justice, and the need to have a smaller ecological footprint. Specific examples that bring home this point include: exploiting workers in order to increase profits, maintaining prejudices toward certain social group, assuming that the poor will always be with us—and are in this condition because of flawed genes or character, assuming that every aspect of daily life can be turned into a market opportunity, the assumption that science is the only valid approach to knowledge. Students should be encouraged to identify other traditions that should not have been started in the first place, or that have outgrown their usefulness.

Another important characteristic of traditions that needs to be framed in terms of historical and current experiences is that once a tradition is lost it cannot be recovered in its original form. Traditions such as many of the older

generation's knowledge of self-reliance have been entirely lost; that is when no one who can recall or still possesses certain skills then the tradition is lost However, there are attenuated or weakened traditions which are now being revitalized by the growing awareness of the loss of civil liberties and the ecological crises and. For example, the current status of habeas corpus is an example of an attenuated or weakened tradition—which can still be recovered.. Among the middle class, many of the traditions of mutual aid are now being revitalized as people become aware of environmental and economic changes. The revitalization of traditions is occurring in the areas of growing and preparing food,, healing, ceremonies, technologies, and so forth.

Lastly, students should be encouraged to consider whether the rapid changes in technologies, fashions, group norms, and environmental conditions, are expressions of traditions or what are simply short-lived fads. Shils makes the point that for some aspect of daily life to become a tradition they have to survive over four generations or cohorts. If the practice, way of thinking, use of language, etc., is carried forward over this period of time it most often then becomes part of taken-for-granted experience. And what is taken-for-granted is a characteristic of tradition—and it is its taken-for-granted status that makes it so difficult to be aware of how much of daily experience is based on traditions.

At the end of the nineteenth century the word consumption referred to a life threatening disease, while today it used to refer to a civic virtue. But this analogy is now being questioned as words such as "ecology" and "sustainability" are becoming more widely used. With the increased reliance on computer mediated thinking and communication, the word "wisdom" has been replaced by "data" and "information". However, with the growing awareness of the deepening ecological crises the word "wisdom" is beginning to be make a come back in the vocabulary of some people.

Again, it needs to be emphasized that the analogies that frame how a word such as tradition is understood are derived from daily experience or from concepts (often mistaken ones) carried forward from a culturally different past by metaphors that now need to be constantly re-examined. While the best and easiest

way to introduce students to an understanding of the complexity of traditions is to have them identify different aspects of daily experience and to ask them whether it has a history or is a passing fad. For older students, it would be useful to read the book Tradition, by Edward Shils. It's a long read, yet it provides the best understanding of the cultural continuities and processes of change that can be called traditions. For an understanding of how some scientists are promoting another narrative, that is, the theory of evolution, that locates the source of change in meeting the test of Darwinian fitness, have them read E. O. Wilson's book, Consilience: The Unity of Knowledge (1998), and Ray Kurzweil's The Age of Spiritual Machines: When Computers Exceed Human Intelligence (1999)

Individualism

Historical and current misconceptions: This metaphor is particularly interesting as an example of how the meaning of words change depending upon changes in the culture's root metaphors. The Biblical account of creation and the fall, according to some interpretations, represented humans as individuals who possessed the responsibility for acting as moral agents and for their future fate. During the time known as the Middle Ages, which was dominated by a combination of Aristotelian/Christian thought, the individual was understood not as autonomous, but as a "subject" in a hierarchically ordered society that did not allow the individual to advance beyond the station she/he was born into. The image of a subject meant that the individual was under the authority of others—including an unchanging social order. Later, with the emergence of the root metaphor that represented change as the expression of progress, and with the spread of literacy, the metaphor of individualism was associated with being a citizen who possessed the right to participate in the political process. More recently, the individual has been represented as the source of creativity and the originator of knowledge and values--in effect, as a self-creating being. Metaphors such as "emancipation" and "freedom" support this image of being an autonomous agent. As pointed out earlier, this idea of being autonomous and self-directing not only contributes to a lifestyle that is dependent upon consumerism, but also to disregarding how this lifestyle contributes to overshooting the sustaining capacity of natural systems.

A basic misconception of the self-creating autonomous individual is that intergenerational knowledge, skills, and past achievements are considered as impediments to the achievements of greater autonomy and self-realization, which leads to the conclusion that the individual has no responsibility for contributing to the well being of the community and for determining which traditions need to be intergenerationnally renewed or challenged. The key point is that this view of individualism is based on abstract thinking that does not take account of the influence of culture, and how individuals are always engaged in an ecology of changing and, in many instances, sustaining relationships.

Analogies that more accurately represent what it means to be an individual: Changing the analogies that frame how many people have been educated to think of themselves as autonomous or potentially autonomous individuals can begin with young children—and it is easier than one might expect. As the current image of the individual in mainstream white/Anglo culture is based on abstractions (abstract words learned as one becomes a member of the language community) the more accurate analogies (the "as like" basis of what the word means) can be found in everyday experiences. The word individual should be associated with the many different forms of relationships with and dependencies on others in the human and natural world. In order to avoid the mistaken idea that traditions, including how language influences individual thought and behavior, it is important to have students describe when and how they give cultural traditions an individualized interpretation. What they write, their patterns of communication (including use of body language), their various skills, etc., need to be pointed out as examples of individualizing culturally specific traditions. The analogies--that is, thinking of their individuality "as like" introducing a slightly or even a major difference in interpreting a tradition—will then be grounded in their embodied/culturally mediated experiences.

Analogies that can be identified include the many relationships they have with the natural world—including the many forms of dependencies. It is especially important to name the dependencies, such as being dependent upon clean water, oxygen to breath, different foods—including the condition of the

soils and oceans for the proteins they cannot live without. Other analogies that will help correct the misconceptions of being an autonomous individual include naming the different ways the individual is influenced by the aesthetics of the natural world—and asking if they could live without their dependency on this aspect of life would again reinforce understanding that their individualism is part of a larger ecology of life sustaining relationships.

As this process of naming is going on, it is important that students are constantly asked to compare their different embodied/culturally influenced relationships and dependencies with the widely held view of the individual as an autonomous being. That is, it is important to avoid assuming that the student will recognize the historically rooted misconceptions. The misconceptions need to be named, and as many examples as possible need to be make explicit.

Older students need to be encouraged to reflect on the many community and environmental consequences that result from taking-for-granted the idea of individual autonomy. How does the idea of individual autonomy contribute to the industrial culture's need for a people who will be dependable consumers? Has the idea of individual autonomy been reinforced by the layout of cities and suburbs? That is, does the reduction in how people interact with each other contribute to the idea of individual autonomy? Does the idea of individual autonomy as the basic social unit make her/him more economically vulnerable? Does this way of thinking reduce awareness of the need to cooperate with others in conserving traditions of civil liberties—or does it lead to a subjectively centered sense of responsibility that is indifferent to the importance of historically shared traditions? What is the form of individualism that is reinforced by the use of different technologies, such a print, cell phones, computers, etc.? As students become older and more able to reflect on the history of ideas and everyday practices, they should be encouraged to read the Western philosophers and current theorists who continue to influence the idea that individuals are autonomous in constructing their own knowledge, identities, and values. The primary Western philosophers include John Locke, Rene Descartes, Adam Smith, John Stuart Mill, and more recently, the scientists who are locating the source of individual agency in the

individual's genes and in Nature's process of natural selection. E. O. Wilson, Lee Silver, and Gregory Stock are spokesmen for the latter shift in how to think of individual autonomy. Libertarian thinkers should also be read, such as Ayn Rand, and the basic question that needs to be asked is whether her view of individual autonomy takes account of the individual's responsibilities as an interdependent member of the bio/cultural ecology.

Freedom:

*Historical and Current Misconceptions***:** As Western Europe emerged from the feudal era, with its many forms political, social, and moral oppressions, the new understanding of what it meant to be an individual also led to analogies that were associated with individual freedom. These included the freedom to read and interpret the Bible for oneself, to chose within limited possibilities where one wanted to live and the kind of work (which emigrating to the New World made possible), and the right to engage in political decision making. Over time these analogies were expanded to include freedom to chose one's own values, to express oneself creatively, (and today) to construct one's own knowledge. While there were many gains that resulted from this expanding list of freedoms, the word (metaphor) itself became increasingly abstract—and thus served more as a conceptual and moral framework that was used to justify a wide range of behaviors. This abstract list of behaviors and values was assumed to represent what all humans should base their lives upon. That is, it was and still is treated as a universal goal that each individual should achieve to the fullest. The metaphor, and its many supporting analogues, was never understood as representing the assumptions of a particular culture. Nor were the ecological implications recognized. What was a powerful and emancipating metaphor in the distant past has now become problematic in terms of how it is currently used to justify ignoring the nature and importance of community strengthening knowledge and the systems of mutual support--as well as the impact of a subjective and consumer oriented understanding of freedom on the environment.

Analogies that more accurately represent the nature of freedom: This word can take on a more culturally grounded and ecologically supportive meaning if it is

associated with a wide range of daily experiences. And again, for younger students, this process of giving the metaphor a more complex and community enhancing set of meanings can be achieved by naming different relationships--such as relationships with the poor, with activities and values that contribute to conserving species, habitats, and non-consumer cultural practices, with political developments that threaten civil liberties and other social justice gains, and so forth.

This process of naming different activities and relationships with others in the community, in other parts of the increasingly interconnected world, and with natural systems, needs to be framed in terms of what can be called the student's existential freedom. That is, what needs to be explained to the student is that in being conscious of activities and relationships there is always of choice of how one will act, and of the values that will be the basis of action. Examples such as when the student observes someone dropping an object on the ground, when another student is being picked on, when there is the possibility of cheating, and even when another student wants what is being said to be taken seriously, there is always a choice—to alert the person to what has been dropped, to speak out against picking on another student, and so forth. These everyday examples of continually making choices are expressions of the individual's freedom—or conscious choice.

However, there are many examples of choice that are dictated by the taken-for-granted ways of thinking, values, and behaviors. In being part of the individual's taken-for-granted way of acting toward others and toward the natural environment, these cultural influences are genuine restrictions on the individual's ability to be consciously aware that there is a choice—which may include questioning what is being taken-for-granted by others. This may take the form of questioning the taken-for-granted idea that the individual's freedom allows her/him to degrade the environment for economic gain. For both public school and home schooled students, discovering one's existential freedom to question this or other taken-for-granted injustices may be justified on more humanistic and social justice grounds. The important point here is that the analog for

understanding freedom in today's world needs to be derived from the daily existential situations where a choice needs to be made, where a question needs to be asked, where what is destructive of human dignity and the viability of natural systems needs to be challenged, and so forth. The merging of the idea of being an autonomous individual with the idea of freedom that does not include an awareness of responsibility toward others leads to a totally self-limiting form of existence that is both self-destructive and destructive of the networks of interdependencies that sustain life. They too often go unrecognized because no one names and discusses them. These silences in the process of socialization also have a profound influence on how freedom is understood.

Older students need to engage in a discussion of how other cultures understand the nature of freedom, the ways in which decisions are reached in these cultures, and the ways the limitations on freedom are understood—especially behaviors that are environmentally destructive and that threaten the prospects of future generations. Students should also be encouraged to read writers who contributed to various ways of interpreting freedom. Attention should be given to whether these writers understood freedom as a universal value or as influenced by the mythopoetic narratives and taken-granted assumptions of their culture—such as the Western assumption that freedom of inquiry, based on a competitive model, always leads to progress. There is also the question of how different views of freedom are understood by ideologies that now guide government policies and international agreements such as the right of the World Trade Organization to override local and even national decision making.

The analogs most often associated with the Western understanding of freedom, such as political, social, and individually-centered interests, need to be examined as to whether they support the idea of that individuals should seek to become increasingly autonomous. An activity that will help ground both metaphors (individualism and freedom) is to have the students do an in-depth description of the cultural context in which freedom is being exercised. What needs to be brought into focus is whether the supposedly free choice is uninfluenced by the taken-for-granted assumptions of the culture. Other

considerations include whether the exercise of freedom takes into account the impact on others and the many ways the individual is dependent upon the natural systems that are an inseparable though often unrecognized aspect of experience. The question that these considerations should lead to is "Is the exercise of the individual's freedom motivated by the idea that her/his wants are the only thing that matters?". In other words, does the title of Ayn Rand's book, <u>The Virtue of Selfishness</u> become the defining analogy for how freedom is understood today?

Community:

Historical and current misconceptions: Current definitions of community in dictionaries sum up the widespread way of thinking in the West. According to these definitions, the analogies associated with the word community include people living together in a specific geographical space, sharing common interest and activities--including where they work, shop, and play. These are the same analogies that are used in public school textbooks to explain to young students the meaning of community. And this way of thinking of community is carried forward through the grade levels and leads university students to make the same basic distinction that separates humans from the natural environment they are dependent upon. This human-centered view of community is not shared by many indigenous cultures where humans and the natural world are understood as part of the same spiritual/moral universe. The reasons that community in the West are understood as existing independent of the plants, animals, and oth**er** living elements of the natural environment can be traced back to the dominant interpretation of the <u>Book of Genesis</u> where humankind was represented as superior to the natural environment, and to the history of Western philosophy where, with only a few exceptions, humans were represented as the only source of intelligence and the environment as an exploitable resource—if mentioned at all.

Analogies that more accurately represent the nature of community: What is shared in common is the analogy that overcomes these historical and current misrepresentations of community. The dictionary and textbook reference to sharing a physical space needs to be expanded so that the analogy for understanding that community is about sharing and interdependence includes the

natural systems that are the source of food, air, water, shelter, aesthetic and spiritual experience--and that call for a deep sense of moral responsibility toward the non-human forms of life. By the same token, the analogies associated with the shared nature of community should also include the language that carries forward both the wisdom and misconceptions of past thinkers and that continues today to bind people to a common way of thinking—including moral responsibility and taken for granted injustices.

Other analogies for understanding what is shared in common, but often not recognized, include the responsibility of living in ways that do not diminish the prospects of future generations—which includes not degrading the life sustaining capacity of natural systems. Still other analogies that deepen our understanding of what is shared within community should include the narratives and keepers of the moral/spiritual insights that have their roots in the culture's history. As it is important to avoid presenting a romanticized understanding of community where only supporting relationships exist, the traditions of prejudice and exploitation that are often part of community should also be identified.

The analogies that represent community in terms of sharing geographical space, history, mutual interests, and vision of social justice should be compared with the current analogies for thinking of the individual as the basic social and economic unit—who has yet unrealized potential to become even more autonomous. What needs to be discussed is whether the two sets of analogies, for thinking about community and individualism, can be reconciled—or whether the analogies for understanding community bring into question the wisdom of upholding the analogies used to support the idea of individual autonomy. The critical issue is whether the analogies for thinking of the individual as autonomous are a result of the abstract thinking of earlier political theorists who carried on the mistake of thinking that abstractions are more accurate representations of reality than ideas derived from embodied/culturally mediated experience.

Literacy and Orality:

Historical and current misconceptions: The spoken word was the primary means of human communication and of cultural storage until religious, political

and technological changes made print and thus literacy a universal requirement. The Protestant revolution promoted the idea that every person should read the Bible for themselves, while the emerging idea of the state required that literacy based upon a common language be promoted in order for the requirements of government to be widely understood and followed. The invention of the printing press made it possible for books and newspapers to be available to a literate public. With the beginning of public education, being able to read and write became one of the prerequisites of democracy, and of what separated developed from undeveloped cultures. The increasing widespread reliance on computers, in education as well as in nearly every other area of life, has further strengthened the privileged status of literacy over the spoken word (or orality). The present analogies for thinking about literacy include the idea of progress, civilization, development, rationally based societies, and technological development. The early use of a rudimentary form of literacy in military operations, then in the spread of literacy prompted by vernacular translations of the Bible, followed by school books, and now computers, have developed to the point where literacy is now a major force in the colonization of other cultures—especially cultures still based on the spoken word.

As the primary analogies for the two words, literacy and orality (or illiterateacy) became established in the minds of the literate public, with literacy being associated with progress and orality (or illiteracy) being associated with cultural backwardness, little attention was given to the cultural transforming effects of literacy. What parents, professors, and public school teachers need to bring out in discussions with students are the cultural mediating characteristics of the increased reliance on print as a source of cultural storage. That is, what is lost and what are the benefits associated with print—and with the spoken word? Both modes of communication, given differences in cultural contexts and a variety of other considerations, are exceedingly complex. Thus, what students need to consider are the most obvious and clear-cut differences, particularly as they relate to sustaining the cultural practices and ways of thinking that contribute to

strengthening the cultural and environmental commons and thus the prospects of an ecologically sustainable future.

Analogies that more accurately represent the nature of literacy and orality*:* A starting place for introducing students to the differences between the two modes of communication is to ask them to talk about what they associate with the two words: reading and speaking. This will bring out the extent they have already acquired the Western cultural bias that represents being able to read as more advanced over face-to-face communication. As part of this opening discussion, students should be asked to describe what is possible and impossible to do when relying upon reading and writing. The same questions should be asked about face-to-face communication. As students begin to describe what they are aware of as they participate in these two modes of communication, it needs to be kept in mind that how they experience themselves participating in these two modes of communication is largely taken for granted. Thus, it may be necessary to give them the words that will enable them to name different aspects of their embodied experience: words such as context, abstract, reciprocity, negotiation of meanings, generalization, universal meaning, memory, sensory experience, one-way communication. Younger students can be introduced to the explanatory power of these words by associating them with concrete examples that are part of their daily experience.

The analogies most directly associated with these two modes of communication can be examined through discussions of how the printed word enables the individual to escape the limitations of her/his own culture and time, to encounter the ideas of people who have made significant contributions in a variety of areas ranging from the arts to technology, and to developing a critical mode of thinking.   These are the some of the positive analogies, but there are also negative ones that are especially important for understanding the forces that are continuing to erode what remains of the diversity of the world's cultural commons. These negative analogies include the abstract ideas constituted in the distant past by theorists who were unaware of cultural differences, the complex ways in which orality sustains community relationships and intergenerational

knowledge. These early prejudices and lack of understanding continue to survive in the form of printed texts. Another aspect of literacy that contributes to the current pathway of globalizing an environmentally destructive lifestyle is that it reinforces the Western tradition of individualism—as literacy is a private interaction between the thought processes of the reader and the abstract narratives and information the author has committed to print. Yet another cultural change reinforced by the current emphasis on literacy, and now computer-mediated communication and thinking, is the tendency to ignore the importance of local contexts and tacit understandings.

Students also need to consider the analogies that are most directly associated with the spoken word. In some cultures the spoken words and narratives are storehouses of prejudices that lead to oppressing certain groups . The spoken word, in shaping the identity and values of the Other, can limit awareness of other values and ways of interacting. In short, it can limit thought and imagination, depending upon the traditions of the culture, in ways that are destructive of community and the environment. There are abundant examples of these limitations in our own culture as well as in other cultures. The constructive, life-enhancing aspects of the spoken word include: constant reinforcement of being a participant in community, the sharing of intergenerational knowledge and talents, learning the patterns of moral reciprocity and mutual support, the deepening of memory of the mistakes of the past and the continual reminders that one should act in ways that ensures a sustainable existence of future generations, the importance of tacit understandings and awareness of context.

These are all analogies that need to be associated with the words "literacy" and "orality" –or reading and speaking. It is always important to connect the analogies with historical events and with the student's embodied/culturally mediated experiences. The connections about which forms of communication contribute to sustaining or undermining the local cultural commons need to be a continual reference point.

Chinua Achebe's, <u>Things Fall Apart</u>, provides an excellent insight into the effects of literacy on a tribal culture in Africa. For older students, Keith Basso's <u>Wisdom Sits in Places</u> provides a description of how the moral codes governing human/nature relationships are combined with a knowledge of the local bioregion—and how they are intergenerationally renewed through face-to-face communication. Walter Ong's <u>Orality and Literacy</u>, provides an in-depth discussion of the different ways in which oral and written modes of communication influence consciousness and social relationships.

Cultural Diversity:

Historical and current misconception: From the beginning of human history, the inability to communicate in a common language brought out the reality of cultural diversity. In the West, however, Plato and other early philosophers argued that there are approaches to knowledge that transcend cultural differences. Under their influence, philosophy, political theory, and other modes of inquiry that became the basis of much of today's academic disciplines reinforced the idea that if there were cultural differences in ways of knowing they could be ranked in terms of whether they corresponded to the modes of inquiry that had been given high-status in the West. As various Christian missionaries spread their message, and as early anthropologists began to study cultural differences, the dominant way of interpreting cultural differences was to order them as at various stages of development—from primitive and pagan to advanced scientific and Christian. The early understanding of evolution led to giving scientific legitimacy to ranking cultures in terms of how far they had evolved—and again, the most evolved cultures were thought to be those that corresponded to Western cultures. This way of thinking gave legitimation to policies and programs that were represented as contributing to the development of backward cultures-- with the language of development masking what was, in effect, a process of colonization.

In the last few decades, there has been a groundswell of resistance to colonization by the West. This resistance grew out of an awareness of different cultural ways of knowing that have achieved their own forms of complexity and achievements—and that they should not be judged by Western standards.

Awareness of the ecological crises has also contributed to an awareness of the diversity of cultural knowledge and moral systems. Of special interest has been how the language of these different cultures serve as storehouses of knowledge about how to live within the limits and possibility of local ecosystems. While there are still religious and economic/ideological groups engaged in colonizing these non-Western cultures, there are other groups who now recognize that there is a connection between conserving the diversity of cultural languages and conserving habitats and species. There is also a growing awareness that other cultures have the right to carry on their own traditions—which can be a problem when the traditions involve acts of violence against their most vulnerable members.

Analogies that more accurately represent the nature of cultural diversity: The analogies for understanding the nature and importance of cultural diversity today must meet the test of whether they foreground local traditions that have a smaller adverse impact on the Earth's natural systems, that strengthen patterns of mutual support within the local cultural commons, and that conserve the local languages and oral traditions essential to the identity and traditions of self-sufficiency in the arts and skills.

The analogies that should no longer be associated with cultural diversity include examples of different cultural practices and traditions that were previously represented as evidence of backwardness. These include the use of categories such as literate and illiterate, developed and undeveloped, civilized and primitive, modern and traditional (when "tradition" is being used as a pejorative word), computer literate and computer illiterate, scientific and pre-scientific. The use of these categories usually involves identifying a single feature of another culture that is misunderstood because it is taken out of context—yet still used as evidence of the culture's backwardness and superstitions. This binary pattern of thinking also involves the failure to consider how different cultures have developed in ways that have reduced their reliance on a money economy and the use of environmentally destructive technologies.

Cultural and Environmental Commons:

Historical and Current Misconceptions: For a brief overview of the history and current misconceptions, refer back to pages ? through ?.   Keep in mind that one of the current misconceptions about the cultural and environmental commons is that they do not exist—even though everyday life would not be possible if people did not rely upon them. This silence, which is based on a widespread misconception, results from a variety of cultural assumptions and economic and ideological forces that dominate the thinking of most Americans. The assumptions that contribute to marginalizing an awareness of the cultural and environmental commons include the idea of being an autonomous individual, of thinking that progress is a constant force in daily life and that traditions are impediments, that the individual is the sources of ideas and values, and that life's most basic needs can be met though consumerism. The current misunderstanding and thus misuse of the political terms, "liberal" and "conservative" also contributes to ignoring the many ways that daily life involve reliance on intergenerational knowledge and skills. Liberalism, on the other hand, is oriented toward individualism, progress, and a human-centered world—which are metaphors that are too often accepted without considering local contexts and the ways the individual is embedded in complex webs of cultural and environmental relationships. The failure to examine whether these abstractions accurately represent local contexts, including how the network of relationships are affected, can be traced to the failure of professors and teachers to provide the language necessary for making explicit these aspects of experience.

The famous essay by Garrett Hardin, "The Tragedy of the Commons" has also led to a series of misunderstandings, including the mistaken ideas that the environment is the only form of the commons and that all cultures are based on the idea of a possessive form of individualism.

Analogies that more accurately represent the nature of the cultural and environmental commons: Helping to make the phrases "cultural commons" and "environmental commons" a taken-for-granted part of the students' vocabulary, and thus of what they are explicitly aware of, starts with naming the different activities and forms of mutual support that have not been monetized or privatized.

The preparation of a meal, the game of chess or cards, knowledge of the edible characteristics of plants, how to put a roof on a house so it does not leak, the patterns of non-verbal communication, understandings of what are private and public spaces, knowledge of how seasons affect planting conditions and the migration of birds and animals, civil liberties, and so forth, all need to be named as examples of the cultural commons. Even with younger students the distinguishing characteristics of these analogs needs to be pointed out—namely, because they are examples of intergenerational knowledge and skills that make it less necessary to be dependent upon a money economy and consumerism. In this way the phrase "cultural commons" becomes associated with what is shared in common, what is being passed along as the tradition of the culture and local community-- in short, what contributes to a sense of belonging, self-identity, and relative self-sufficiency in daily life. This process of understanding how daily experience is nested in and dependent upon the cultural commons then becomes the basis of a form of moral reciprocity that takes account of the well-being of others—and the responsibility to pass on to the next generation the legacy of intergenerational knowledge and skills that enables individuals to discover their talents and moral center in the ongoing communal patterns of mutual support.

The same process of making explicit the connections between the phrase "environmental commons" and the different ways humans are dependent upon the natural environment also needs to begin with younger students. And the same general distinction between what traditionally has been part of the environmental commons and what has been privatized by individuals and corporations need to be make explicit. The naming of the environmental commons would include sources of water, beaches and shore lines, oceans, animals and plants, quietness unique to different bioregions as well the darkness of the night, clean air, soils, forests, and so forth. Each of these characteristics of the natural environment become analogies for understanding what is being referred to by the phrase "environmental commons".

As students become older and attain a more grounded and in-depth understanding of the different cultural and environmental settings they move in,

they should be introduced to the different ways in which the cultural and environmental commons are being enclosed—which is the next metaphor that needs to be understood not only in terms of its many analogs but also in terms of how different forms of enclosure contribute to new forms of dependency and poverty that go beyond that of not possessing enough money to sustain a consumer-dependent existence.

Enclosure:

Historical and current misconceptions: Again, an extended discussion of the origins and various forms of enclosure can be found by referring back to the earlier discussion of the nature of the cultural commons and the different forms of enclosure. Here, it is necessary to point out that the widely held cultural assumptions about the importance of becoming an increasingly autonomous individual, the progressive nature of change, and the way that the industrial model of production and consumption is the primary source of social progress and human well-being, reinforce the idea that the enclosure of both the cultural and environmental commons are all part of the belief system that sustains progress. These assumptions, in effect, make the enclosure of both commons, as well as the enclosure of the diversity of the world's commons, appear as natural as the growth of a child into adulthood, and a seed into a mature plant. When these assumptions are taken-for-granted, questioning them appears as irrational as questioning the rotation of the earth or the rising of the sun.

Analogies that more accurately represent the nature of enclosure: Younger students can be encouraged to describe the embodied/conceptual differences between planting a garden, including participating in every stage until the vegetables are eaten, and buying industrially prepared food. Their descriptions of the differences in what is learned, the development of skills and mentoring relationships, and what is shared between the two experiences should be the focus of discussions about the nature of enclosure. Analogies for understanding the different forms of enclosure can be experienced by having students replicate an assembly line approach to production where efficiency dictates the segmenting of the work task, and then comparing this experience with one where they are

involved in the entire process, from conceptualization to completion. Following their embodied experience of adapting their thinking and behaviors to what is required on an assembly line, the following questions might arise: What skills are left undeveloped when working on a assembly line and which skills are made to appear obsolete? What relationships fail to be developed? How has reliance upon consumerism reduced an awareness of the ecological consequences of the production and shipping processes? What aspects of experience are marginalized by the amplification and reduction characteristics of the technology?   In introducing younger students to the experience-based analogies that represent different forms of enclosure, it is important to avoid presenting them with abstract explanations. Encouraging them to engage in a thick description of the before and after experiences of enclosure will help to ensure they recognize that the various forms of enclosure have serious consequences for themselves, their community, and the environment.

Older students should be able to understand the more complex and less obvious forms of enclosure, such as how an ideology (total belief and value system) can justify certain practices and beliefs that, in turn, exclude other practices and beliefs. What is being excluded or prohibited are expressions of the process of enclosure. These examples range from the belief that the government must have information on everything the individual does-- ranging from travel, economic activity, to what they communicate to others—to the belief that every aspect of the cultural commons can be turned into a product or service in a market economy. In the first examples, what is enclosed is privacy, while in the second example the community traditions of self-sufficiency and mutual support are being enclosed (that is, no longer shared in common largely outside of a money economy).

Older students should also be introduced to the way in which language can lead to various forms of enclosure. These include the enclosure of the community's memory of past struggles for social justice and of past mistakes that are no longer part of the curriculum or talked about at the dinner table, or in the media. If students do not hear any references to their civil liberties and to the

importance of the checks and balances system of government, they are less likely to be aware of when these traditions are being enclosed. The key is for students to learn that language both illuminates and hides—and what is hidden are the silences that are the expression of past forms of enclosure. It needs to be constantly reiterated that enclosure--whether it takes the form of privatization of water and the air-waves, or the traditions of government that are the basis of their civil liberties, or the intergenerational knowledge of how to be more self reliant in the areas of food and energy—involves the exclusion from traditions and skills that previously were shared in common largely outside of a money economy.

There are two other important issues that need to be discussed. The first is how the various forms of enclosure contribute to the cycle where the silence about the traditions of self sufficiency of the local cultural commons lead to dangerous levels of indebtedness and to the further degradation of natural systems. The second relates to whether there is a moral framework that can be used to challenge the widely held assumption that there are no limits on what can be turned into a new market opportunity. These issues should be connected to a discussion of what students need to understand in order to be able to exercise communicative competence in resisting environmentally and community destructive forms of enclosure.

In order for students to obtain a balanced understanding of the different forms of enclosure, and how they relate to ecological and social justice issues, it is important to identify examples of enclosure that are based on racial, gender, and social class biases. Historically, social status as well as other forms of prejudice excluded certain groups from what were examples of the cultural and environmental commons, such as education, equal access to the civil rights that others took for granted, toxic free environments, and so forth. These forms of enclosure bring out again that it involves exclusion from what was previously shared in common; while the commons, in most instances, involves equal access and participation in what contributes to relatively more self-sufficient communities.

Globalization:

Historical and current misconceptions: Globalization is a metaphor that came into current use after the World War II. It has often been associated with the idea of globalizing the Western model of development, which included both the market system of production and consumption as well as the form of democracy that is based on the ideas of the autonomous individual and the progressive nature of change. Today, it is used almost exclusively to refer to the spread of the market system and a consumer dependent lifestyle. The analogies thus are primarily economic, technological, and political—with the assumption that they lead to progress.

The idea of globalization has its roots in the traditions of Western philosophy as well as in Christian theology. Western philosophers contributed to the idea of globalization (a word they did not use) by creating theories of knowledge and morals that did not take into account other cultural ways of knowing. Cultural differences, if they were acknowledged at all, were framed in terms of what later became known as the Social Darwinian stages of development, moving from primitive to advanced civilizations guided by Western assumptions and technologies. Christian theology has also laid the groundwork for today's global thinking by emphasizing the need to convert the diverse people of the world to various interpretations of the Christian faith.

The early way of thinking of the world as a single culture (or the prospects of achieving a universal culture) has many problems that are becoming magnified as the effects of global warming impact different regions and ecosystems. The chief misconception associated with the metaphor of globalization is that it is used to justify the colonization of other cultures—and misrepresents this process of colonization as the expression of progress. Economic globalization has the effect of undermining the diversity of the world's cultural commons that support lifestyles that are less dependent upon consumerism and are thus less environmentally disruptive. It also undermines local economies that are often adapted to the characteristics of the local ecosystems. Technological globalization also undermines traditions that are adapted to the characteristics of the bioregion—and this can be seen most clearly in the globalization of the

Western model of agriculture that requires the destructive uses of fertilizers, pesticides, and heavy machinery.

Political globalization is also a form of cultural colonization and domination as it undermines the diversity of traditions that are the basis of local decision making—many of which promote an awareness of knowledge refined over generations of experience. However, there are traditions that need to be revised or rejected.

Analogies that more accurately represent the nature of globalization: If this word becomes part of the conversation or of what the student hears and reads, it is important to explain that everybody and all practices—ranging from lifestyles to uses of technology—are not the same.

Thus, the analogies associated with globalization should include examples of how global-oriented practices and policies have lead to major problems, such as pollution, exploitation of natural resources, hyper-consumerism with its accompanying toxic wastes, loss of employment, and the undermining of local decision making and intergenerational knowledge, and so forth. Analogies that will bring out the positive meaning of the word include globalizing basic human rights, becoming aware that natural systems are globally interconnected, and that the deepening of the ecological crises will have global consequences.

For older students, more concrete analogies of the destructive and constructive consequences can be identified by examining the impact of universalizing Western science and technology, ideologies such as market liberalism, approaches to education –including reliance upon computer-based education, and the monetization of what previously was part of the cultural and environmental commons.

Liberalism:

Historical and current misconceptions: The key concept that goes back to the earliest liberal thinkers is that individuals should be free to express their ideas, free from arbitrary arrest, free to question and to overturn oppressive governmental policies, free to pursue their own economic interests, and free to live a self-chosen life. The early thinkers who helped to establish these analogs as

the core meaning of liberalism included John Locke, Adam Smith, and John Stuart Mill. This stream of liberalism, which has adopted a stronger emphasis on social justice issues should be referred to as social justice liberalism. The early roots of liberalism also included an emphasis on the importance of free markets which became known as laissez-faire economics. With the rise of the Industrial Revolution what can be referred to as market liberalism has taken on a separate identity, and has become increasingly in conflict with social justice liberalism. Both traditions of liberalism continue to share common assumptions, such as the autonomous nature of the individual, the progressive nature of change, the power of abstract theory to guide future governmental policies, a human-centered view the world, and a Social Darwinian way of thinking about other cultures.

That is, both traditions of liberalism share the common heritage of Enlightenment thinkers who assumed that rational thought rather than embodied/culturally influenced experience should guide human actions and governmental policies. They also share the Enlightenment biases and misconceptions about the nature of traditions—which both traditions of liberalism continue to view as an obstruction to economic progress and to achieving greater social justice. Another part of their common Enlightenment heritage is to view non-Western cultures as less evolved and thus in need of being transformed by the introduction of Western ideas, institutions, and consumer habits. That is, while the social agendas of the two streams of liberalism impact people's lives in profoundly different ways, especially the poor and politically marginalized, they are both powerful colonizing forces in the world today that carry forward the silences of the earliest liberal theorists about the importance of living in ecological balance with the world's natural systems.

Analogs that more accurately represent the nature of the two traditions of liberalism: The two distinct traditions should be made explicit in any discussion of what liberalism means. The analogies that continue to establish what market liberalism stands for include: (1) free and competitive markets that operate (as the theory holds) best when there is no government regulation; (2) competition between economic interests will ensure that the most efficient survives—and that

this will contribute to the overall well-being of society; (3) government should not provide support for the poor and otherwise disadvantaged as it will promote their inherent tendency toward indolence; (4) that there are no moral limits on turning the cultural and environmental commons into new market opportunities; (5) that free and competitive markets and limited governmental responsibility for the welfare of the poor should be adopted by all countries—and that the military should be used to enforce these policies; and (6) that education should produce reliable workers needed in the global economy.

The core analogies that establish what today's social justice liberal is like include: (1) viewing individuals, regardless of race, religions, gender and social/economic circumstances as free and potentially equal in terms of participating in the various realms of society; (2) using the democratic process to re-orient government programs in ways that address different sources of inequality, exploitation, and limitations on achieving a full and meaningful life; (3) being critics of corporations and governmental policies that serve the financial interests of a few over the well-being of the many; (4) carrying forward the historical silences about the nature and importance of the cultural and environmental commons—as well as the prejudices toward non-Western cultures as being less developed and thus in need of adopting the core Western assumptions that are also shared by the market liberals; (5) emphasizing progress and continual change while failing to recognize that their successes in the areas of social justice—such as improving the civil liberties and economic well-being of workers, feminists, ethnic groups, and so forth—are now traditions that need to be "conserved" (a word that they are reluctant to use).

As the analogies that influence what these two traditions of liberalism "are like" are too complex for younger students to fully understand, if and when the discussion of what liberalism or liberals comes up, it is important to point out that there are two distinct traditions of liberalism—and that they share a number of assumptions. That is, both traditions of liberalism can be explained as believing that change leads to progress, that the individual is free and thus uninfluenced by culture, that they share a common history but now have different

social and economic agendas, and that they both assume that their different agendas represent the most progressive stage of human development which should be shared (and imposed) on the rest of the world.

If students are following the media reports on political campaigns it is important to identify the candidates in terms of their core beliefs and policy positions. If candidates are promoting free trade, a reduced role for labor unions, tax relief for the already wealthy, school vouchers, privatizing functions previously performed by government, reducing government assistance programs, and protecting the interests of corporations in such areas as health care and international trade agreements, they should be called market liberals—and not conservatives. By the same token, if candidates are promoting policies that address issues related to rebuilding the national and community infrastructures, providing better public services (including health care, housing and job training), and in protecting what remains of our civil liberties and checks and balance system of government, they should be referred to a social justice liberals.

Referring to people who hold these two radically different political agendas as liberals, or even as conservatives—in the case of market liberals who are being mislabeled—dumbs-down the intelligence of the student. Regardless of the family's political orientation, the correct labeling of different political agendas makes it possible for students to become aware of differences and similarities—which is essential for establishing a clearer understanding of the their own beliefs and the arguments they would use to justify them.

As students become more mature in experience and aware of the wider world they are part of, they should then be engaged in discussions of the history of these two traditions of liberalism, as well as discussions of whether the core ideas of these two traditions of liberalism are adequate for understanding how to reduce the human impact on the environment—including how to slow the rate of global warming. This discussion will have a greater educative effect if it is connected with what students have already learned about how the metaphorical nature of language carries forward the misconceptions and silences of earlier thinkers who helped to establish the analogs that still frame the meaning of much

of today's current vocabulary. This will help to make explicit the problem of double bind thinking where the ideas that were instrumental in creating a culture that is overshooting the sustaining capacity of natural systems are still being relied upon to make the transition to a more ecologically sustainable lifestyle.

Conservatism:

Historical and current misconceptions: Since the time of the Enlightenment, which led to many important political, social, and technological advances, the analogs that continue to give the word conservatism its pejorative meaning include maintaining the status quo, protecting the privileges of the rich and powerful, and with resisting change, new ideas, and modernization itself. The other metaphor that was similarly categorized by relying upon essentially the same analogs is the word tradition. The two metaphors, until recently, have been the focus of criticism by so-called progressive thinkers and activists. However, following the enactment of Roosevelt's New Deal, the labels of conservatism and conservative have been used to designate the critics of his social welfare agenda. More recently, the terms have been used in a less pejorative way by today's politicians who, are in fact, market liberals. Like the earlier misunderstanding of conservatism, even when it was used as a label for a political party, the current use of conservatism by politicians, political commentators, and the general public is also based on misunderstandings—especially now that the analogs identified with conservatism include the appointment of market liberals to the Supreme Court, the overturning of the tradition of habeas corpus, the efforts to replace the separation of powers with an all-powerful executive who is not subject to the Constitution, and the loss of privacy as the government expands it surveillance of peoples' activities and ideas.

There are a number of reasons why the metaphor has been so badly misunderstood and misrepresented. One of the chief reasons is that public school and university students have not been asked to read and think about the writings of philosophical conservative writers such as Edmund Burke, the men who wrote the Federalist Papers, and Michael Oakeshott. If students had been asked to read

these writers they might be more aware that the current environmental writers that some are encountering in their courses, such as Wendell Berry, Aldo Leopold, and Rachel Carson, are today's genuinely conservative thinkers

They might also realize that the problem of identifying as conservatives the corporations, politicians, and military that are transforming the world's cultural and environmental commons into exploitable markets that are further deepening the ecological crises which the genuine conservatives are trying to mitigate.

Analogies that more accurately represent the nature of conservatism*:* If students listen to the references to politicians on the television, or read news reports on the Internet or in the local paper, they are being exposed to the process of metaphorical thinking where the meaning of the word conservative is established through examples of "as like" thinking. The politicians who defend water boarding and reducing aid to the poor become, according to the current pattern of metaphorical thinking, are now the widely used analogies that frame the meaning of the word "conservative". Whenever the student hears or sees this process of associating the word conservative with a politician, governmental policy, or social group, the question the student needs to be encouraged to ask is "What does this individual or group want to conserve?". This simple question will help to ground the use of language where it no longer reproduces the misconceptions that are so easily hidden when it is used as an abstraction—that is, as a label that encodes past misconceptions and is nevertheless imposed on a set of beliefs and practices that further add to the current state of confusion and misrepresentation.

In addition to encouraging students to identify daily practices and beliefs that have been carried forward over four generations as traditions, and to consider whether the traditions have a constructive or destructive impact on community and the natural systems we depend upon, students also should be encouraged to examine whether the patterns of everyday life should be conserved or reformed. They might come to realize that there are many conserving forces that sustain life, as well as the traditions that are essential to our civil liberties and our ability to have a smaller ecologically destructive impact. The analogies that represent the

conserving forces in life include the DNA that carries forward (conserve) the genetic information that governs the life forming processes that range across the entire range of organisms, the way in which language conserves earlier ways of thinking, the taken for granted cultural patterns that are conserved because their influence operates below the level of conscious awareness. Other analogies that need to be identified with conserving would be the various organizations that label themselves as some form of nature conservancy, the scientists and community groups working to conserve habitats and species, the wide range of people who are passing on the intergenerational knowledge and skills of how to live less consumer dependent lives, the ranchers and farmers who are adapting their methods to the self-renewing characteristics of the local ecosystems.

Students also need to be encouraged to learn about how indigenous cultures conserve traditions that enable them to live in environments that require careful attention to the limits and possibilities of local ecosystems. How their language, use of technologies, narratives and ceremonies, political decision making, as well as how these cultures are attempting to resist the colonizing impact of the West's technology, consumer lifestyle, and reductionist approach to science, also need to be considered as expressions of conserving.

The conserving of traditions that segregated and exploited groups based on race, gender, religion, and other stigmatizing characteristics also needs to be examined. Conserving of traditions that exploited workers, that allowed the dumping of toxic waste in rivers, that forced youth to learn the language and norms of the groups that were dominating them, that kept wages low and safety conditions non-existent, and so forth, need to be recognized as the analogs that should be associated with other metaphors such as exploitation, domination, and capitalism (when it is treated as a universal law governing economic activity).

After students learn to consider their embodied/culturally mediated experiences, gain in background knowledge, become more knowledgeable about the rapid changes in the Earth's ecosystems, and take more seriously the ways in which our current system of government is being undermined, they should be encouraged to read writers who possess a deep and embodied understanding of

conservatism. In terms of contemporary conservative writers, the essays and novels of Wendell Berry, such as <u>Jayber Crow</u> and <u>Hannah Coulter</u>, would provide a good introduction to the thinking and values of environmental and community-centered conservatism

A principal concern of many philosophical conservatives relates to the liberal assumption that human nature is inherently good and that there is no need for a checks and balance system of government. A novel that focuses on this issue and would be highly suitable for students is William Golding's <u>Lord of the Flies</u> which is also available as a movie. Older students should be encouraged to read <u>The Federalist Papers,</u> and Michael Oakeshott's criticism of technologies based on rational approaches to achieving greater efficiency, which can be found in the <u>Politics of Rationalism</u>. Again, the examples of daily practices, people's way of caring for each other and the land, traditions of democratic government and civil liberties, intergenerational knowledge and skills that strengthen community and have a smaller ecological impact, are just a few of the analogies that should be associated with the words conservatism and conserving. Critical inquiry, when it is framed by a concern with ecological sustainability and the achievement of social justice, also should be viewed as a long-standing tradition that needs to be conserved—and that is an important analog for understanding the nature of genuine conservatism. To paraphrase Edmund Burke, if people do not understand what needs to conserved, they will not understand what needs to be changed.

Subsistence

Historical and current misconceptions: The traditional analogs most often associated with the word "subsistence" include marginal economic conditions, culturally undeveloped, life on the edge of poverty, The choice of these analogs reflect the perspective of the modern thinker who is judging other cultures against the criteria of Western science and materialism. The metaphor is often used to justify the imposition of Western approaches to development, such as replacing local building materials with what is used in the West, substituting traditional agricultural practices with supposedly more modern approaches that require the

use of pesticides and fertilizers, and replacing local seeds with genetically engineered ones, and so forth.

Generally overlooked by Westerners who view subsistence as a sign of poverty and backwardness is the way many aspects of the local culture—ranging from food, clothes, building materials, agricultural practices, role of markets—are adapted to the characteristics of local ecosystems. Also overlooked are the many patterns of mutual support, ceremonies, ways of reintegrating members who have deviated from the norms of the group, and (most important of all) the smaller ecological footprint that results from not relying entirely on sources of energy that release large amounts of carbon dioxide into the environment and from a less environmentally exploitive lifestyle.

Identifying the positive aspects of life in subsistence may help to correct a basic misconception that confuses subsistence with poverty. With the changes in habitats resulting from global warming, there are going to be hundreds of millions of people who may no longer be able to sustain a consumer dependent lifestyle and thus will have to pursue a subsistence lifestyle. As long as such a lifestyle retains the patterns of mutual support, reliance on what the local environment can sustain on a long-term basis, provide for the development of skilled craft-persons and artistic expression, it should not be viewed as requiring foreign approaches to integrating the local economy into the global economy and industrial system of production and consumption.

Analogies that more accurately represent the nature of subsistence: As it is likely that only older students will encounter this metaphor, it is important to clarify one of the distinguishing characteristics of many subsistence cultures: namely, as they are less reliant on a money economy they rely more upon patterns of mutual support which can be seen in the difference between workers who are paid as opposed to workers who reciprocate by assisting their neighbors. Analogies that students can easily associate with many of the patterns of subsistence cultures include what is experienced within the cultural commons of their own community. These analogies include the sharing of surplus food from local gardens, the weaving of materials that are made into clothes, the sharing of

skills and labor in constructing a building and in other community activities such as creating a water sharing system, participating in the various arts and ceremonies that rely upon local talent, and so forth.

Wealth:

Historical and current misconceptions: Sacred texts nearly have been unanimous in representing wealth as found and demonstrated in the quality of mutually supportive relationships and in working for social justice. This view of wealth is central both to one of the primary messages of the Social Gospel of the New Testament and, according to an important interpreter of Jewish law, the Torah. With the rise of Industrial Revolution and the pursuit of monetary wealth, which have contributed to a major distortion of values in Western cultures, and is now being exported to non-Western cultures, wealth has become associated with the accumulation of money, material goods, and political power.

This modern and secular view of wealth is reinforced through thousands of television commercials, in every store front, in the size and model of houses and cars, on every street where clothes are seen as an index of wealth, in high-end stores, and in every speech where the politician and economists equates wealth with the state of the economy—and appeals for policies that will further expand the economy. This industrial/consumer view of wealth is not only self-serving, but contributes to the secularizing and thus transformation of the values and spiritual insights that identified wealth as expressed in the quality of relationships—and in the wisdom of how to ensure that the quality of life of generations is not diminished. Each of the public displays of consumerism and of what constitutes the wealthy person is an analogy that reinforces what wealth means in modern and secular culture. In effect, the question "What is wealth like?" is answered in the many ways that consumerism is displayed and in the lifestyle that the media represents as examples of being rich and famous.

Analogies that more accurately represent the nature of wealth: How youth come to think of themselves, as well as the values they should pursue, are not genetically determined—but rather by the multiple messages that dominate the

cultural environment they inhabit. Because the cultural messages that represent wealth in material and possessive terms are so powerful and prevalent in the formative stages of the development of youth, they are likely to become part of thinking and values that are take for granted in later years.

As this view of wealth subverts the more spiritual views of wealth, as well as the ecological systems that all life depends upon, it is important to identify different analogies for understanding the nature of wealth. Again, for younger students, this can be achieved by identifying different activities, relationships, skills, discovery and development of talents, as examples of wealth. That is, the word wealth needs to be associated with these non-monetized, non-material, and non-status expressions of wealth. This will lead to thinking of wealth in terms of what contributes to the well-being of community, the environment, and the world. Naming mutually supportive relationships, activities, and skills changes another assumption that is associated with the economic view and public display of material wealth, which is that wealth is achieved through competitive and even exploitive relationships.

Older students should be encouraged to do a survey of the different ways in which wealth is represented in the everyday market-oriented experiences as well as how it is shared in the cultural commons. In terms of the former, it is important to examine the values that are reinforced in the pursuit of material wealth; values such as competition, self-interest, sex and violence, disregard for the prospects of future generations, placing human greed above conserving the natural environment, deceptions about human needs, and so forth. Documenting the various ways in which these values are promoted in the media, shopping malls, and the workplace involves learning to become aware of the cultural messages that go largely unrecognized by a mesmerized public.

At the same time, students should document the networks of mutual support within their community, the different ways in which intergenerational knowledge and skills are shared, and the mentors and people of wisdom. How the culture understands and values different forms of wealth can also be documented by examining the values promoted in video games, in films, and in the built

culture. The understanding of wealth promoted in these areas of culture should be compared with the values promoted in the different narratives that are important to the identity and value systems of different ethnic/cultural groups in the community. When students make the break from thinking of wealth only in material and monetary terms, they will then begin to recognize the importance of supportive relationships, the symbolic expressions of wealth expressed in narratives and the creative arts, and in the complexity of language itself. The lack of vocabulary, as well as reliance upon a vocabulary that is framed by the analogies of earlier thinkers who had a limited understanding and thus a limited awareness of alternative ways of thinking of wealth, are examples of poverty—which is the opposite of wealth. The basic question that students need to ask is "Which form of wealth has a smaller adverse impact on the environment and the traditions of mutual support within the community?".

Poverty:

Historical and current misconceptions: People within faith and wisdom traditions have associated poverty with analogies such as self-centeredness, with an inability to recognize beauty in the environment and in other people, with misguided ideas and values that undermine community, with an inability to recognize the various expressions of hubris, and with the propensity to join mass movements led by demagogues. People influenced by modern and secular assumptions tend to identify the analogs that are signs of poverty with a lack of economic resources, educational opportunities, health and food security, and as being excluded from the political process. Both sets of analogies need to be taken seriously in any discussion of what constitutes poverty. The faith and wisdom traditions of understanding poverty, while recognizing the importance of the modern expressions of poverty within a consumer-oriented culture that promotes various forms of dependency, also recognize the deeper and largely overlooked sources of poverty—which are the values of selfishness, pursuit of material wealth over all other values, and the uncritical acceptance of the market liberal ideology that is colonizing the world's cultures.

Analogies that more accurately represent the nature of poverty: The analogies widely associated with wealth (that is, wealth as the possession of money, power, vast material possessions) also frame how poverty is understood. The metaphors of poverty and wealth, in terms of the taken for granted analogies, are interdependent. Identifying wealth with material possessions and money leads to identifying poverty as a state of lack. What is important to remember in helping students to avoid this reductionist and abstract way of thinking of poverty is to have them observe other people's activities and relationships—and to identify and thus name the activities and relationships that fit the two different ways of understanding poverty—the one informed by traditions of faith and wisdom and the other by traditions within the industrial/consumer oriented culture.

Naming such practices as misrepresenting the health benefits of a new drug, increasing the cost of public services for members of minority groups, and dumping industrial toxins in the nearby river, is the first step to engaging students in a discussion of how a certain way of understanding wealth, such as equating it with money and social status, contributes to not recognizing the many expressions of poverty—which may include the lack of food and health security. Other analogies for understanding other expressions of poverty include the lack of knowledge and skills essential to being less dependent upon consumerism—and the failure of being mentored which, in turn, will reduce the likelihood of being able to mentor others. Students also need to engage in discussions that focus on how cultural practices based on the analogies derived from faith and wisdom traditions would lead to redefining both wealth and poverty.

Older students also should be encouraged to examine how poverty is understood within different ideological frameworks, such as market liberalism, libertarianism, and an ecologically informed conservatism. The current effort to extend the theory of evolution as a way of explaining which cultures will meet the test of Darwinian fitness also has important implications for how poverty will be understood if the proponents of this way of thinking recognize that their natural allies are the market liberals and libertarians now working to make free markets the basis of the world's economies. All three ideologies (when evolution is used

to explain which cultures will survive it becomes an ideology) involve highly abstract explanations of why the stronger and better adapted are winners and why others are losers in highly competitive environments. As degraded environments and failed economic policies are forcing more people into poverty, the ideologies that justify the "survival of the fittest", to recall the slogan of 19th century Social Darwinism, are being accepted without question by different powerful segments of society. Whether these abstract theories accurately represent why some individuals and social groups achieve greater material wealth and power, and why others remain mired in poverty and limited possibilities, will challenge the students' ability to critically examine the problems that arise when abstract theories are relied upon to justify complex public policies.

Examining what is problematic about imposing abstract theories (guiding ideological frameworks) on the everyday cultural practices of different cultural groups will also bring out the silences in the theories. For example, neither the ideology of market liberalism nor the cultural extrapolations from the theory of evolution take account of the most critical issues now facing humanity: namely, how to reduce the exploitation of the natural environment when the dominant way of thinking within the culture is still based on myths created by Western philosophers and social theorists who ignored how the natural systems in their day were being degraded. The extension of the theory of evolution (that is, that the environment selects the better adapted cultural "meme"-- the cultural counterpart of the gene) as a way of explaining which ideas, values, technologies, behaviors, etc. will survive is based on the Western assumption about a linear form of progress and the convergence of cultures—which contradicts the biological understanding of evolution as leading to a greater diversity of species.

This recommendation may appear as a difficult challenge for public school teachers, home schooling parents, and students. Its significance, however, cannot be overstated. With human activity now changing the Earth's natural systems in ways that endanger life as we know it, teachers and parents should no longer rely upon the excuse that critically examining the conceptual/moral basis of the

interpretative and guiding frameworks (ideologies) that were formed before there was an awareness of environmental limits is too difficult.

Progress:

Historical and current misconceptions: The current way of thinking of progress as the inevitable outcome of change (particularly technological change) in the West only goes back 500 or so years. Prior to the spread of literacy which followed the invention of the printing press, the rise of empirical science and medicine, the Enlightenment view of rational thought, and the early roots of democratic thinking, it was widely held by Christians that humans had fallen from the original perfection of creation. Thus, the models of what humans could only hope to replicate were in the past. With the convergence of new ideas that no longer represented individuals as subjects limited by the station they were born into, including the ability of the new sciences to explain natural phenomena in ways that increased human control of the environment and the gains in representative government that led to addressing social injustices, the idea of linear progress took hold. It led to thinking of progress as moving beyond the past, with the result that traditions, as explained earlier, became viewed as sources of resistance to progress.

The cultural amnesia that the current view of progress requires is only one of the problems we face as a result of the failure of past generations to consider what this view of progress was destroying. Other problems associated with this view of progress, now narrowed down largely to economic and technological gains, include overshooting the sustaining capacity of natural systems, being a major cause of global warming, undermining the cultural commons of other cultures (thus adding to the impact of their ecological footprint), and creating a greater degree of dependency upon a money driven economy (even as this economy is undergoing fundamental changes as a result of outsourcing of work to low wage regions of the world and automation that reduces the need for workers—but not consumers).

Analogs that more accurately represent the nature of progress: The basic problem associated with how most people take for granted the high-status culture

underlying the industrial/consumer oriented culture is that their understanding of progress is not based on an ecological way of thinking. Instead of thinking that all innovations represent progress, new ideas, technologies, policies, values, and so forth should be understood as part of a larger ecology of human and environmental relationships—and that this larger ecology includes the ways of thinking and technologies of the past that are still sources of influence on the present, and on the prospects of future generations of species, habitats –including humans.

When the word progress appears in the curriculum, in conversations, and in various media, it is important to encourage the student to consider what is being represented as an example of progress (that is, what is the new expression or analogy for understanding progress). This should be followed by asking what is being lost or replaced, followed by a consideration of who benefits and who loses in terms of the innovation. That is, the student should be urged to consider how the innovation impacts the neywork of relationships it is being introduced into. An example which older students should consider is how scientists in the past equated the introduction of new synthetic chemicals into the environment without being concerned with how they interacted with other chemicals. Progress was too often understood as finding a new chemical that would correct or eliminate a specific problem such as insects that were damaging crops. It is only now that we are beginning to recognize that the nearly two hundred toxic chemicals currently found in humans living in the West, as well as in the systems of animals, reflect the failure to question this earlier view of progress. For a concrete example of how equating change (and innovation) with progress, older students should read Rachel Carson's book, The Silent Spring.

The approach to identifying more adequate analogies for understanding important metaphors such as progress should be similar to what was recommended earlier for freeing the student's way of understanding from the misconceptions of the past. That is, regardless of age level and background of experience, the student should be encouraged to consider the meaning of progress in relationship to her/his embodied experience. The process of giving close

attention to the different ways that anything identified as the progress will reveal how it alters relationships, empowers, dis-empowers, advantages some individuals while creating problems for other, impacts habitats, adds to global warming, contributes or undermines intergenerational knowledge and skills, and so forth. Give closer attention to one's own embodied/culturally mediated experience will lead to a wealth of possible analogies for reframing what progress means. Further discussion will winnow the list down to what represents the essential gains and losses of the new idea, technological innovation, political decision, and so forth.

Given the global reach of the consequences of global warming, there are many examples of new technologies now being represented as the latest example of progress that may turn out, upon more careful consideration, to have the opposite effect. Similarly, with the changes in our political system, there is a need to ask where the changes being represented as progress are leading us. Do the different forms of surveillance technologies, including the massive data banks, contribute to safeguarding our democratic institutions, including the checks and balances system of government?   What is important to keep in mind as a teacher is to have the student examine what is being represented as progress by placing it in today's context—with all of its environmental and cultural complexities being taken into account. Then ask the students to consider what the most important issues are—and here it may be necessary to remind the students of the changes that the environment is undergoing-- including the likely possibility that future changes may not enable her/him to achieve what was thought possible in the past.

Like so many metaphors that carry forward analogies chosen in the distant past, the students' understanding of what constitutes genuine progress, rather than being victimized as a passive agent who assumes that abstract words , requires examining local contexts, the experiences of other people and cultures affected by what is being called progress. Most important of all is the question of whether what is being represented as progress contributes to an ecologically sustainable future. Too much of education involves getting students to think in certain ways, with too little attention being given to how they exist within the multiple levels of

complex and interdependent systems—ranging from the life forming chemical/genetic codes to changes in the temperature of oceans and habitats that even govern the sources of food and where work will be available. Survival depends upon shifting from reinforcing the metaphors framed by analogies that reproduce the taken for granted interpretations of the past, to reconstituting what we associate with key metaphors—that is, what are the more accurate and currently accountable analogies.

Development:

Historical and current misconceptions: How this metaphor was and continues to be understood has always been influenced by the root metaphors of progress and economism. That is, the taken for granted way of thinking was that development meant progress—mostly in adopting Western patterns of thinking, technologies, educational institutions, consumer-based lifestyle, and now computers and cell phones. This word marginalized concerns about the importance of local knowledge and practices, as well as the traditions within Western cultures that represented what is being referred to here as the cultural and environmental commons. The metaphor has carried a double meaning: as a policy for improving the standard of living in what were identified as undeveloped cultures, and as a high sounding word that hides the forms of colonization that are carried on in the name of development. By making the expansion of free markets and the adoption of the high-status forms of knowledge that underlie the industrial/consumer oriented culture the two primary analogies for how development is understood, this metaphor has led the further enclosure of the cultural and environmental commons--and thus to the promotion of a more environmentally and community destructive lifestyle.

Analogs that more accurately represent the nature of development: This word is not likely to come up in the curricula and conversations involving younger students. However, as students move further along in their public school, home schooling and university experience, the word is likely to be encountered more frequently. It will be used as a powerful legitimating metaphor in discussions about how the technologies of Western cultures, in such fields as medicine,

agriculture, communication, education, manufacturing, etc., need to be introduced into other cultures if they are to achieve a higher level of development—and thus a higher standard of living. The use of the word in terms of these examples (analogies) needs to be accompanied by asking what local traditions of self-sufficiency and ecologically informed practices are being undermined by the different Western approaches to development. That is, the word development needs to be approached from a critical perspective, one that takes account of the ecological impact as well as the new forms of dependency that accompany different development agendas but are too often overlooked.

In the West, development is generally associated with some form of economic progress. While this is still an important concern, especially in cultures where life is mired in poverty and disease, the word needs to be associated with other analogies that have the effect of highlighting the importance of local cultural traditions—which may include the development of the symbolic world of narratives, creative and expressive arts, architectural skills and use of local materials, craft knowledge and skills, and so forth. In short, the word development also needs to be associated with further strengthening the traditions that are the basis of self-sufficiency and mutual support within the culture.

As students move into the upper grades, the role that this metaphor has played in justifying various social and foreign policies needs to be considered, with special attention being given to the impact of various development policies on the well-being of local populations. When does the introduction of Western technologies, such as computers, television, agricultural practices, medicine, make a genuine contribution? And when does it create new forms of dependencies that sink the local population further into poverty? With global warming being accompanied by changes in growing conditions, and availability of water and sources of protein, it is important to frame the discussion of development in terms of whether it further impoverishes the local population. In short, development should not be automatically associated with progress.—particularly since many of the forms of development that have been pursued in the West now turn out to be major contributor to global warming.

Sustainable:

Historical and current misconceptions: Home schooling students as well as public school students are likely to hear this word used in many different contexts. Thus, it is important to recognize the analogies that make this word so deceptive where it is too often used to legitimate environmentally destructive practices. The analogies that are the source of deception include the many ways corporations represent their products as contributing to an ecologically sustainable future—with the message being that the product has little or no environmentally destructive attributes. Politicians also represent their policies as contributing to the sustainability of natural systems. Recent examples include referring to the clear cutting of forests as the "Healthy Forests Restoration Act" and the dumping of more carbon dioxide into the atmosphere by electrical generating plants the "Clean Air Act". Other deceptive analogies can be found in the media and publications that justify their economic interests as contributing to sustaining natural systems. Often these analogies are also associated with the equally problematic metaphor of progress.

Analogs that more accurately represent the nature of sustainable: There are as many analogies for what the word "sustainable" represents as there are activities and practices that have a smaller ecological impact. The list includes relying upon local sources of food, including recipes that do not require special ingredients shipped in from distant places, the sharing and exercising of skills when using local building materials—including recycling materials rather than purchasing what is new, developing skills and talents in the creative arts that are shared with others in the community, spending time reading and writing—everything from poetry to plays and political/social commentaries, engaging in community discussion groups and various forms of relaxation that do not involve a high level of consumerism and travel, participating in political discussions and activism that strengthen local democratic decision making and greater awareness of the traditions of civil liberties, mentoring others in various arts and crafts, and so forth

The traditions of the cultural commons that include the narratives and practices that marginalize and exploit minority groups are not analogies that should be identified as examples of what is sustainable. Nor are the various governmental policies that force other countries to become part of the global free market system that is overshooting what can be sustained by their local ecosystems—and that undermine the community-centered economies previously adapted to the local characteristics of ecosystems and cultural traditions.

There two basic criteria for determining examples of sustainable cultural practices. First, the cultural practices that do not degrade the local environment and the environment of other cultures. Second, cultural practices that contribute to the self-sufficiency and moral reciprocity within the community.

Science (and Scientism):

Historical and current misconceptions: As Western science gained greater credibility through its emphasis on knowledge and technologies based on what can be observed, measured, and tested under experimental conditions that could be replicated by other scientists, it displaced other approaches to knowledge that were not based on the experimental method of inquiry. The analogies that represent an awareness of the legitimate domains within which scientific inquiry yields important knowledge and leads to useful technologies are as many as the contributions made in the areas of medicine, ecology, engineering, agriculture, and so forth. However, the efforts to claim that the scientific method can be extended to such areas of human life as the symbolic and value systems that are the basis of cultures—and even consciousness, are examples of scientism.

The key characteristics of science that separate it as a mode of inquiry from other forms and approaches to knowledge include the following: (1) the answer to questions is based on empirical evidence, (2) the empirical evidence, including data, is not selected on the basis of religious, ideological, or other belief systems—rather it is supposed to be objective and thus not influenced by human values and prejudices; (3) new knowledge discovered through experimentation and empirical observation must meet the test of being validated by the

observations and experimentation of other scientists; (4) scientifically based knowledge is open to future discoveries and thus never represents the final Truth.

Analogs that more accurately represent the nature of science and scientism: When the words science and scientist are used, the collection of analogies that give these metaphors their special standing in society are widely recognized: the pursuit of knowledge uninfluenced by religion, politics, self-interest on the part of the scientist, objective, universally valid, and so forth. Science and scientists are words that students will encounter,but they are not likely to encounter the word scientism.

Students should be introduced to those aspects of experience that cannot be investigated through the scientific method. These include values, embodied experiences that include memory, meaning, imagination, the multiple messages that are communicated through relationships, belief systems that are taken for granted—including their history, the ways in which the languaging processes that sustain culture influence individual identities and even consciousness.

As students gain more experience and knowledge, they should be introduced to what is problematic about the key analogies that inform how Western science is understood. These key analogies include the idea of objective knowledge and data, that the scientist is a neutral observer of phenomena and the outcome of experimental inquiry, and that the scientist does not have a personal interest in the discovery of new knowledge and thus in marginalizing competing knowledge claims. The race that led to the discovery of the double-helix is an example of the latter, and the efforts to discredit the observations of Rachel Carson about the destructive effects of DDT (for which the discoverer received the Nobel Prize) is yet another example of how scientists often have a personal investment in marginalizing competing claims and evidence.

Another problematic characteristic of the analogies most often associated with science and scientists is that their mode of inquiry is not affected by many of the same prejudices held by the non-science segments of society. It should be pointed out to students that Western scientists have a long history of rejecting the knowledge of local ecosystems that many cultures obtained through hundreds of

years of observing the inter-relationships within different local ecosystems. That is, it is only recently that some scientists are taking seriously indigenous knowledge—and this is often the result of learning that indigenous knowledge can be patented and integrated into the West's market system.

The prejudices that scientists often bring to their investigations are carried forward in the metaphorical language they are introduced to as infants learning to think and communicate in the conceptual patterns influenced by the taken for granted assumptions of their language community. The long held prejudice against women, including the assumption that scientific knowledge of male diseases and responses to various drugs could be used as the basis for understanding how women respond to similar treatments, is just one example of how scientists, until very recently, shared the many of same prejudices as the rest of their society. The assumption that new discoveries are inherently progressive in nature reproduces the widely held way of thinking that change is the expression of progress. It has only been recently that scientists are beginning to understand that all living entities are part of very complex information exchanges—and that human ways of thinking and communicating are not as unique as previously understood.

Helping older students to recognize when scientists are engaging in scientism can be seen if they keep in mind the key criteria of scientific inquiry. When the scientist is claiming that cultural values and ways of knowing are subject to the Darwinian process of natural selection, when the scientist is claiming that the nature of consciousness (including why some people become musicians while others do not) will be discovered through scientific inquiry, when the scientist is claiming that a "gene rich" strain of humans needs to be engineered, when the scientist is explaining the sources of values and why religions exist, when the scientist is claiming that evolution is displacing humans by computer driven machines, when the scientist claims that when we have the theory of everything (which will be a mathematical formula) humans will then know why they are here and what the purpose of life is, and so forth, the student should be told that these are examples of scientism. In short, scientists making

these and similar claims have overstepped the boundary separating science from scientism. In short scientism involves making scientific claims that cannot be empirically verified—and most aspects of the symbolic world of cultures cannot be reduced to what can be empirically observed and measured.

Scientism is a genuine problem as the authority that society accords to scientists too often leads to accepting their non-scientifically grounded predictions and explanations as being factual—and carrying the same certainty associated with scientifically based knowledge. When this occurs scientists have entered the murky domain of politics and disinformation. As there are different groups in society who find their belief systems already challenged by scientific knowledge that has met the test of being replicated by others in the scientific community, these expressions of scientism supports their extremist claims that even the well documented discoveries of science should be questioned—such as global warming, evolution of the species, and that human activity has changed the chemistry of the world's oceans.

Concluding Thoughts on How to Avoid Dumbing Down Students

Key points to remember:

1. Words are metaphors that carry forward over many generations the analogies that were settled upon in the distant past—that is, words have a history and carry forward the misconceptions and assumptions of the past.

2. The analogies (where the concept associated with words such as individual, progress, tradition, and so forth are derived some another concept that shares similar characteristics—the "as like" or "similar to" move that is made in trying to understand the new or the old and familiar in a new way) are always influenced by the root metaphors of the culture.

3. Root metaphors are the deep, generally taken for granted interpretative frameworks that influence thinking, values, and practices over a wide range of culture—and over generations and even thousands of years.

Depending upon their stories of creation and powerful evocative experiences, cultures often do not share the same root metaphors

4. Root metaphors frame the process of analogic thinking, and as they are taken for granted—such as thinking of organic processes as having the characteristics of a machine—they influence current thinking in ways that reproduce earlier ways of thinking that did not take account of the current challenges we now face.

5. As language is the basis for communicating about relationships, it carries forward the culture's basic values and prejudices. This occurs through the way the language (again as a layered system of metaphors) represents the culture's taken for granted way of understanding the attributes of the participants in the relationships. Thus, the attributes associated with the word "weed" makes it morally OK to use a pesticide in order to destroy it rather than to inquire about its other properties and role in the life of the local ecosystem. Cedar trees were once viewed by the timber industry as not having economic value and, therefore, it was morally OK to burn them as a waste product. When certain assumptions are taken for granted, such as thinking of the poor as not having the attributes of a strong work ethic and as being inferior in mind and social responsibility, it is moral for the government to withhold support. Always ask how the language represents the attributes of the participants (human and non-human) and thus what the culture allows as the moral behavior that should govern the relationship.

6. Always ask whether the analogies that are carried forward and frame the current meaning of words (metaphors) contribute to strengthening the intergenerational knowledge and skills that enable individuals and communities to live less consumer dependent and thus less environmentally destructive lives.

7. Try to keep informed about what is being reported through responsible sources about the changes taking place in the sustaining characteristics

of nature systems—such as the rate at which glaciers are melting, the decline in the world's fisheries, the rising cost of food such as wheat, the changes in weather patterns that are altering habitats and threatening species with extinction.

8. Keep constantly in mind that when you participate in the dumbing down of students you are also jeopardizing the prospects of future generations—that is, your progeny and the progeny of others you care about.

9. Be alert to the many ways in which local approaches to revitalizing the cultural commons—which range from relying upon local sources of food, greater community participation in the various creative arts, mutual support systems, and efforts to recover the traditions of local decision making and civil liberties—are often motivated by the desire to engage in activities that are a form of "giving back" to the community. These are the analogies that need to be reinforced as alternatives to thinking of individual success, happiness, and group identity in terms of how much they are able to consume.

10. Keep in mind that changing the language is part of changing the world—and that this carries with it the responsibility of recognizing that we are part of an interdependent world—and that our survival depends upon the survival of other people and the habitats and species that seem so distant and unrelated to us. It should also be kept in mind that the failure to question whether the metaphors currently used today carry forward the misconceptions and silences of the past represents the acceptance of linguistic colonization.

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Appendix: Handbook for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses

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_2 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, <u>An Inconvenient Truth</u>, on how to reduce consumerism. They should also be asked to read "The Darkening Sea" by Elizabeth Kolbert (<u>The New Yorker</u>, 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, <u>An Inconvenient Truth</u>, 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 Harden'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, anthropocentism, 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,

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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**

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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)

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Appendix D Show the video by Helena Norberg-Hodge, <u>Ancient Futures: Learning from Ladakh</u>

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A. <u>A basic definition of enclosure.</u> 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. <u>Brief history of enclosure</u>. 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 (<u>res privatae</u>), what was owned and thus the responsibility of the state (<u>res publicae</u>), and what represented the natural world common to all (<u>res communes</u>). In 1215, the English Magna Carta re-affirmed the Roman understanding of <u>res-communes</u>—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. <u>New forms of enclosure</u> <u>that have a similar impact on the self-sufficiency</u> and <u>local democracy of communities</u>. 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. <u>Some forms of enclosure are necessary to achieve greater social and ecojustice</u>**.** 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 <u>How to make the local cultural commons and the various forms of enclosure part of the same process of learning</u>**. 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, <u>Transforming Environmental Education</u>, 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. <u>What every teaching/learning situation requires</u>: 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 an 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.