Title: The Case Against John Dewey as an Environmental and Eco-Justice Philosopher

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Abstract

Environmentally oriented philosophers and educational theorists are now attempting to clarify how the ideas of John Dewey can be used as the basis for changing cultural practices that contribute to the ecological crisis. While acknowledging that Dewey can be interpreted as a non-anthropocentric thinker, and that his method of experimental inquiry can be used in eco-management projects, this paper addresses why Dewey should not be regarded as an environmental and eco-justice philosopher—and by extension, why his followers should not be regarded in this light. The argument supporting this contention has three parts: (1) that Dewey's emphasis on an experimental mode of inquiry did not take account of the knowledge systems of other cultures—particularly cultures that are more ecologically centered; (2) that Dewey's understanding of language prevented him from recognizing how the root metaphors (meta-cognitive schemata) he took for granted were also the basis, with several exceptions, of the Industrial Revolution; (3) that his failure to understand the complex nature of tradition, including the different ways in which intergenerational knowledge is shared and renewed, makes it difficult for his followers to address a central eco-justice issue—which is to regenerate within diverse cultural communities the non-commodified forms of knowledge, skills, and relationships that enable individuals and communities to have a smaller ecological footprint.

My participation in a recent conference on Pragmatism and Values held in Stara Lesna, Slovakia rekindled my doubts about the relevance of Dewey's ideas for addressing an ecological crisis that has many dimensions beyond that of global warming. I say rekindled my doubts, as they were first formed by Richard Rorty's attempt to reconcile the contingent knowledge and values of the ironist individual with his anthropocentric interpretation of solidarity.[1] Although the participants at the Slovakian conference had been exposed in their individual lives to frequent media coverage of global warming, depletion of the world's fisheries, and evidence that industrial chemicals are changing the reproduction patterns of humans as well as other species, not one of the participants attempted to relate Dewey's ideas to what is now the most problematic set of issues we face. [1] This is particularly surprising as Dewey made problematic situations the starting point and central focus of experimental inquiry. My more recent reading

of the essays in Environmental Pragmatism (1996), edited by Andrew Light and Eric Katz, further confirmed my concern that the attempt to represent Dewey as an important environmental philosopher will have little, if any, influence on environmental thinkers.

In the chapter titled "Nature as Culture: John Dewey's Pragmatic Naturalism," which appears in Environmental Pragmatism, Larry A. Hickman explains how Dewey can be interpreted as an evolutionary naturalist, and even as laying the basis for an epistemology that situates inquiry within contexts where nature and the human community are integral aspects of problematic situations—and thus to the reconstruction of experience. If I allow myself to accept the conceptual boundaries that Hickman and the other contributors to Environmental Pragmatism take-for-granted, I can even appreciate Dewey's argument that the experimental nature of what he termed the "method of intelligence" is enhanced by an educational process that provides for the widest possible participatory decision making. The problem is that I cannot accept these conceptual boundaries. This is because Dewey's epistemology, as well as the recent efforts to revive his philosophy, are too limited for addressing the cultural roots of the ecological crisis. Even more serious is that his ideas, even when his efforts to naturalize intelligence are considered, cannot be used to clarify and give legitimacy to more ecologically sustainable cultural practices. Indeed, I shall argue that the characteristics of culture that are excluded from consideration by Dewey and his current followers are at the center of a double bind that would arise if his epistemology were to be universalized. That is, I shall argue that his epistemology, with its emphasis on growth in the capacity to reconstruct experience and thus to replace spectator based knowledge with his method of intelligence, would represent yet another expression of western colonialism—and that this would further undermine the ability of many cultures to avoid the consumer/technology dependent lifestyle that is one of the major contributors to the ecological crisis.

The ideas of Dewey and his current interpreters are based on a fundamental misunderstanding of cultural diversity, the nature and role of mythopoetic narratives and the resulting root metaphors that encode a culture's way of understanding relationships, and the intergenerational nature of traditions. I shall address each of these aspects of culture in order to show that key aspects of Dewey's philosophy cannot be used as a basis for affecting the deep cultural changes that the ecological crisis will force us to make.

1. The Diversity of Cultural Epistemologies:

It is important to acknowledge at the outset that Dewey's references to culture are based on an evolutionary framework that represents cultures as either backward or advanced. Backward cultures, according to Dewey, rely upon a spectator approach to knowledge as well as fixed truths and values. In Democracy and Education (1916) he states that the method of intelligence of savages is "plainly absurd—so absurd that we fail to note that savages are simply falling back upon habit in a way that exhibits its limitations". [2] Advanced cultures, on the other hand, are oriented toward growth, experimental inquiry, democracy, and what Michael Eldridge terms "secularity".[3]

The following is typical of how Dewey understood the nature of culture. As he puts it in Art as Experience (1959 edition)" as the developing growth of an individual from embryo to maturity is the result of interaction of organism with surroundings, so culture is the product not of efforts of men put forth in a void or just upon themselves, but of prolonged and cumulative interactions with environment". [4] This explanation appears to reaffirm the argument that Larry Hickman makes in Environmental Pragmatism about the biocentric nature of Dewey's philosophy. While the culture/Nature connection is important in the current debate over whether Dewey was an anthropocentric thinker, the more important issue is that this and other similar statements of Dewey reflects an evolutionary (developmental) way of understanding culture. And this evolutionary framework serves to delegitimate the efficacy of other cultural epistemologies. Dewey's failure to take account of differences in cultural ways of knowing, and thus approaches to community and human/Nature relationships, can be seen in the way the lectures he presented at the Imperial University of Japan in 1919 omitted any reference to the cultural way of thinking of his hosts. Statements such as "change is associated with progress rather than lapse and fall" and "growth itself is the only moral end" must have sounded strange, even incomprehensible to those in the audience who had not already become westernized.[5]

It also needs to be pointed out that Dewey's singular focus on what he called the "method of intelligence" totally marginalized the cultural ways of knowing that characterized the neighborhoods of Chicago and New York, which was part of the environment he interacted with on a daily basis. The question that needs to be asked is: Was his vision of democracy based on the assumption that Italian, Irish, Jewish, and Polish immigrants, to cite the larger ethnic groups, should abandon their ways of knowing and traditions that served as the basis of their identity and patterns of moral reciprocity in order to be participants in the new democratic social order?

A second question also needs to be asked: Do the contemporary followers of Dewey expect the members of the world's major cultures to abandon their ways of knowing in order to embrace Dewey's method of intelligence? It is interesting to note that E. O. Wilson , another advocate of an evolutionary interpretation of culture, shares the Deweyian assumption that the experimental method of western science should become the basis of knowledge, values, and even the religions of the world's cultures.[6]

The multiple moral, political, and environmental problems connected with universalizing Dewey's pragmatism, as well as the revisionist interpretations found in Rorty's Contingency, Irony, and Solidarity (1989) and Michael Eldridge's Transforming Experience: John Dewey's Cultural Intrumentalism (1998) are simply ignored. They are even omitted from the various interpetations of the usefulness of pragmatism found in Environmental Pragmatism. The failure to address these issues is especially ironic when we consider that many of the world's cultures (Western Apache, Balinese, Zapotec—to cite just of few) represent cultural epistemologies and moral systems that involve lifestyles that have a smaller adverse impact on their bioregions.

Both Rorty and Eldridge deserve to be faulted even more than Dewey as their writing is being done in a era marked by widespread media coverage of, as well as scientific reports on, the rapid decline in the viability of natural systems. Rorty's ironist individual, as well as his category of "final vocabulary" which serves the same obfuscating function as Dewey's category of the "spectator theory of knowledge," would be an affront to many cultures that have much to teach us about living less consumer-centered and technology dependent lives. Instead of juxtaposing the "final vocabulary" with the ironist individual who worries that "she has been initiated into the wrong tribe, and taught to play the wrong language games".[7] Rorty should have explained why the western assumptions underlying his vision of a liberal society are more worthy than the assumptions that have enabled many cultures to develop complex symbolic systems for governing moral relationships within their communities and with the environment. His assumptions about equating change with progress, the autonomous individual whose major focus is on self-creation, and an extreme anthropocentism that appears rooted in nineteenth century Classical Liberalism are also the assumptions that were the basis of the Industrial Revolution. While Eldrige does not argue for Rorty's version of relativism, the subtitle of his book, "John Dewey's Cultural Instrumentalism" incorrectly suggests that differences in cultural epistemologies will be a major focus of his analysis. What Eldridge does

is to appropriate the word culture without any recognition of the epistemological differences between cultures. Indeed, he fails to consider the deeper implications of referring to Dewey's epistemology as a "cultural instrumentalism." That is, he fails to explain the culturally specific assumptions it is based upon, and to acknowledge that the relativism that is at the center of Dewey's epistemology is guaranteed by another culturally specific assumption: namely, that "experimental intelligence" will always lead to progressive changes.

2. Mythopoetic Narratives and Root Metaphors:

The failure to situate Dewey's philosophy within the context of the world's other cultural epistemologies represents a serious limitation. Even more serious is the failure of the contributors to Environmental Pragmatism to acknowledge the cultural epistemologies of ecologically centered cultures, and thus to explain why the shared characteristics of these epistemologies should be replaced by Dewey's experimental mode of inquiry. A comparison with the cultural epistemology of the Balinese [9], Western Apache[10], and the indigenous Andean cultural groups [11], or any number of other cultures that have not adopted the western mode of production and consumption would have helped to highlight Dewey's failure to understand that the basis of moral reciprocity governing the relationship and practices of these cultures within the Natural world is grounded in their mythopoetic narratives. The Balinese temple system, which regulates the allocation of water to the rice paddies on an ecologically sustainable basis, is rooted in their mythopoetic narratives that explain how the temple ceremonies balance the forces of good and evil—which in turn leads to a culture that has made the arts of poetry, dance, and theatre a central aspect of everyday life. The mythopeotic narratives that connect the specific physical features of the Western Apache bioregion with the stories of ancestral experiences, which are encoded in the place names, connect a knowledge of place with the moral insights of the ancestors. Learning the names of the landscape also involves learning the moral codes that are to guide the behavior and thought of the Western Apache. In the case of the Quechua mythopoetic narrative, the spirit world, human communities, and natural world are interconnected and, according to Frederique Apffel-Marglin, form a living whole. As she explains it, "the three realms meet at the site of the chacra, the field where the peasants raise their crops but also any site where the human community, the natural community, and the community of deities converse and reciprocate in order to regenerate life".[12] Before dismissing

these cultures as being backward, and my reference to them as the expression of naïve romanticism, it should be kept in mind that the Balinese tried and rejected the "Green Revolution" as unworkable even though it was based on an experimental mode of inquiry, and that the Quechua culture goes back at least 10,000 years and is the eighth most productive center of cultivated plant species in human history.

For Dewey and his present interpreters, mythopoetic narratives are the basis of ignorance, and are to be replaced by the method of intelligence. That is, ideas and values are to be assessed in terms of consequences that follow from acting upon them. As Dewey succinctly put it, "experimental empiricism in the field of ideas of good and bad is demanded to meet the conditions of the present situation".[13] In place of wisdom about relationships, first encoded in stories of creation that represent humans and Nature as part of the same spiritual/moral world and tested and refined over generations of communal experience, Dewey and his environmentally oriented interpreters want the immediate experience of each generation to be the basis of moral insight. As Kelly Parker puts it, "For the pragmatists, 'participatory democracy' is a political expression of the metaphysical idea that reality is involvement and transformation. Because the public consists of a vast plurality of people and things valued, and because the world is changing at every moment, the ways and means of providing for the individual and the common good have to <u>be experimentally determined</u>" (italics added).[14] Michael Eldridge, who fails even to mention the environmental crisis, explains Dewey's approach to reconstructing the moral values that guide relationships in the following way: "Criticism was the instrument of his humanistic naturalism. But it was not just a means for Dewey; it was also an end—a way of associated living that would allow us to constantly revise the present in terms of projected better possibilities and ensuing results as simultaneously critical, intelligent, democratic, humanistic, and secular".[15] And Rorty's revisionist interpretation of Dewey led him to claim that "there are no nonhuman forces to which humans should be responsible".[16]

While many of the world's cultures are based on mythopoetic narratives that have had an environmentally destructive impact, and are used to justify the denial of basic human rights to many of their members, the fact remains that there are other cultures that have developed moral values and technological practices that represent an understanding of the interdependence of humans and the natural world. In some cases, they even regard the natural world as sacred, and

thus not reducible to a natural "resource". Given the existence of these ecologically centered cultures, and the fact that many of them are actively resisting being further colonized by western technologies and modes of thinking, the question arises as to whether the current followers of Dewey have considered whether an ecologically sustainable future would be better assured by promoting Dewey's experimentalism on a world wide basis. There is also the question of whether his followers understand that the experimental method of problem solving involves a political process that does not always lead to a new and higher level of consensus, and that the outcome, when practiced in the real life situations, is not always democratically determined. One of the consequences of recognizing only one method of intelligence is that what Dewey termed the "recalcitrant minority" might decide to ignore the importance of participatory decision making and how the majority perceive the common good. Recent political events bring home a point that Dewey and his followers have never acknowledged: namely, that in some areas of public decision making the position taken by the "recalcitrant minority" was the one that should have prevailed. Initially, it was a minority of Americans who resisted the Viet Nam War; and it continues to be a minority that is resisting advances in biotechnology that promise to change the basis of life as we know it. In effect, Dewey's epistemology leads to opening all aspects of everyday life to the political process, and thus, if universalized, would undermine those cultures where decision making is carried out within the framework of morally coherent mythopoetic narratives. In the case of many indigenous cultures, the mythopoetic narratives underlie their ecologically sustainable practices. It would also undermine the moral authority that underlies the efforts of various groups in American society who are attempting to address environmental and social justice issues. Dewey's epistemology would require that the moral values used to legitimate various political decisions emerge from the same experimental process of inquiry that is to determine the ideas that are to be acted upon; thus the moral values would be treated as relative until validated by decision making process of the group.

There is another problem with Dewey's epistemology that his current interpreters have failed to address. Dewey did not understand how language encodes and carries forward over time earlier patterns of metaphorical thinking. Edward Sapir, a contemporary of Dewey, was writing about the connections between language and cultural ways of knowing during the same period of time (the late nineteen twenties and early thirties) that Dewey was writing his most important books on a naturalistic view of intelligence. It is interesting to speculate on whether a

knowledge of Sapir's writings might have led Dewey to alter the arguments he made in Knowing and the Known (1947) that "the naming of the observation and naming adopted is to promote further observation which in turn will advance and improve. This condition excludes all namings that are asserted to give, or that claim to be, finished reports on reality".[17] Simply stated, Dewey was proposing that words should be emptied of their historical content in order to avoid distorting the connections between direct experience and the exercise of intelligence. At the same time Dewey was writing The Quest for Certainty, which was based on the assumption that the method of intelligence is free of hidden cultural influences, Sapir was giving a paper at the 1929 joint meeting of the Linguistic Society of America and the American Anthropological Association in which he explained that "the 'real world' is to a large extent unconsciously built up in the language habits of the group." He went on to say that "the worlds in which different societies live are distinct worlds, not merely the same world with different labels attached….We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretations" (italic added).[18] Rorty was more aware of the reproductive characteristics of language, but mistakenly incorporated Donald Davidson's misunderstanding of the metaphorical nature of language when he should have taken seriously the writings of Richard Brown, Mark Johnson, and George Lakoff on the connections between the metaphorically layered nature of language and thought.[19]

In spite of Hickamn's attempt to establish that Dewey was not an anthropocentric thinker, and the attempts by the other contributors to Environmental Pragmatism to put environmental philosophy on a pragmatic footing, they all continue the Dewey/Rorty tradition of ignoring the role that language plays in reproducing the culture's taken-for-granted ways of understanding relationships—including how to think about the attributes of the participants in the relationship.. As I point out in my earlier critique of Rorty's misunderstanding of the metaphorical nature of language, the root metaphors of a culture, which are often based on its mythopoetic narratives, frame the process of analogic thinking, and over time become encoded in the iconic or image metaphors that largely are a taken-for-granted part of daily thought and behavior.[20] Examples of root metaphors derived from western mythopoetic narratives include patriarchy, anthropocentrism, and the autonomous individualism. Root metaphors that had their origins in powerful evocative experiences and philosophical writings (which were themselves influenced by taken-for-granted root metaphors) include linear progress,

mechanism, economism, and, now, evolution. Root metaphors provide the meta-cognitive schemata or interpretative framework, which can be seen in Dewey's thinking. He challenged the prevailing assumption about individualism, and whether his thinking is based on the root metaphor of anthropocentrism is now being debated by the contributors to Environmental Pragmatism. However, the root metaphors of linear change and evolution provided the meta-cognitive schemata that enabled Dewey to assume that the experimental method, and the political/educational process that is required to carry it out in a participatory setting, would always lead to more progressive and intelligently based relationships. Dewey's genderized use of language also indicates that he took for granted the schema or interpretative framework dictated by the root metaphor of patriarchy.

There is yet another characteristic of language that brings into question Dewey's understanding of how moral norms can be based on the method of intelligence. It also has special relevance to any discussion of environmental ethics. Not only does language encode a cognitive schemata that frames how we think,, it also carries forward the culture's understanding of the moral norms that govern relationships. The root metaphor of patriarchy framed how the attributes of men and women were to be understood. These attributes were, in turn, encoded in the process of analogic thinking and in the iconic metaphors where it was automatically understood that the engineer, scientist, historian, and carpenter were male activities. Similarly, anthropocentrism was encoded in the language in ways that led to thinking of the environment as a resource, as a wilderness that had to be brought under human control, and as property that can be individually owned. The recent emergence of "ecology" as an alternative root metaphor now leads to thinking of wilderness as the natural condition of diversity and self-regeneration that needs to be preserved—and recovered. To cite another example, the use of evolution as a root metaphor possesses important explanatory power in the area of natural phenomena, but leads to exceedingly problematic thinking when extended to areas of cultural beliefs and practices—as the writings of E. O. Wilson and Richard Dawkins demonstrate.

The implications of not understanding how the metaphorical nature of language carries forward earlier culturally specific forms of intelligence deserves more extended treatment in any assessment of Dewey as an environmental philosopher. However, I want to conclude this part of the discussion by pointing out the double bind in trying to make the case that Dewey is

a "biocentric thinker" when his thinking is based on two of the root metaphors that were taken-for-granted by the promoters of the Industrial Revolution: the interpretative framework that represented change as the linear expression of progress, and evolution as way of justifying the colonization of non-western cultures deemed to be backward and, in today's language, "undeveloped." The question that needs to be addressed by philosophers arguing that Dewey is an environmental philosophy is this: will the adoption of Dewey's epistemology, and its underlying root metaphors, by cultures based on more ecologically centered mythopoetic narratives (root metaphors) contribute to a more sustainable future?

3. Tradition:

In assessing Dewey's contribution to living more ecologically sustainable lifestyles it is important to emphasize that his epistemology lays out a method of experimental inquiry that is to be applied in every aspect of a daily life that is constantly caught in the crosscurrents of change. No values or behaviors rooted in intergenerational experience are to be understood as being more inherently ecologically sound than others. In effect, the ongoing experiences of the present generation, guided by experimental inquiry, is to determine what constitutes the values and ideas that are to be the basis of behavior. To put it another way, Dewey's method of intelligence, as well as what the contributors to Environmental Pragmatism propose as the pragmatic basis of an environmental philosophy, involves the continual experimentation with the conceptual and moral foundations of experience—with the result that the immediate experience of experimental inquiry becomes the test of newly formed ideas and values. I reiterate this point because it is crucial to understanding the forms of knowledge that are marginalized or represented as the residue of oppressive traditions. Knowledge refined over generations of living in a bioregion, and encoded in ceremonies, in the wisdom of elders, in the vernacular architecture and agricultural practices, and in the taken-for-granted linguistic and behavior patterns of everyday life do not meet the strict criteria of experimental inquiry—and thus are to be regarded as traditions or habits that limit the method of intelligence. In effect, by not challenging the limited approach Dewey takes to what constitutes knowledge, the effort to represent Dewey as an environmental philosophy marginalizes the various forms of knowledge that characterize many indigenous cultures that have learned to live within the sustainable limits of their bioregions.

The double bind that characterizes the efforts to represent Dewey's "pragmatic naturalism" as a guiding environmental philosophy, which would require ecologically-centered cultures such as the Hopi, Cree, and Zapotec to reject their traditional forms of knowledge in favor of Dewey's approach to growing in the ability to reconstruct experience, can be traced to his misunderstanding of tradition. Eldridge and Rorty reproduce Dewey's mistake of equating traditions with habits, which Dewey describes as "behavior (that) is confined by channels established by prior behavior…and monotonous regularity.[21] Dewey further explains the limitations of habits (traditions) in the following way: "habits reduce themselves to routine ways of acting, or degenerate into ways of action to which we are enslaved just in the degree in which intelligence is disconnected from them." "Routine habits," he continues, "are unthinking habits." [23] Habits, as dispositions, must be continually reconstructed through the use of intelligence (experimental inquiry). It is important to note that he placed the emphasis on the formation of new ideas. As he wrote in The Quest for Certainty, "knowledge which is merely a reduplication of ideas of what exists already in the world may afford us the satisfaction of a photograph, but that is all." [24]

Rorty reproduces Dewey's misunderstanding of the nature of tradition in his arguments for a liberal democracy where ironist individuals engage in the process of "self-creation."[25] Traditions, or what Rorty refers to as "common sense," are viewed as limitations on this process. Repeating another mistake of Dewey's, which is to place habits and intelligence in opposing categories, Rorty states that the "opposite of irony is common sense," which is his code word for tradition. Common sense, as he puts it, "is the catchword for those who unselfconsciously describe everything important in terms of the final vocabulary to which they and those around them are habituated"[26]

Michael Eldridge summarizes Dewey's view of tradition by stating that Dewey held that "our inherited ways of knowing and doing are inadequate to the task of relating existence and value," and that Dewey's primary aim was to "make out present beliefs, attitudes, and organization more intelligent than they would otherwise be." (italic added)[27] The chapters written by Kelly Parker, Larry Hickman, and the other contributors to Environmental Pragmatism omit any reference to the nature of tradition and its role in carrying forward intergenerational knowledge and values that have a smaller ecological impact.

The word "tradition" encompasses all aspects of cultural life that are re-enacted over four generations. It took Edward Shils 330 pages to describe the characteristics of traditions that are largely a taken-for-granted part of daily experience: the many patterns and technologies that we rely upon, how traditions change from within and from outside forces, how some traditions should not have been constituted in the first place while others change too slowly to fit current sensibilities, how other traditions disappear and are only recognized in hindsight as important to civil society—and the impossibility of recovering traditions once they are gone, the anti-tradition traditions that have as one of their chief goals the overturning of all traditions..[28] The point of bringing Shils' more complex and accurate account of our dependency on traditions, as well as the dependency of Dewey, Rorty, Eldridge, and the contributors to Environmental Pragmatism on taken-for-granted traditions, is that it helps clarify how Dewey and his followers overstate the efficacy of experimental inquiry. It also foregrounds the importance of intergenerational knowledge that, in many instances, represents alternatives to the consumer and technology dependent lifestyle now being globalized. To cite just one example of the importance of intergenerational knowledge that has special significance in terms of ecologically sustainable communities, the vast knowledge that indigenous cultures have of the plants and animals within their bioregion, particularly their knowledge of the medicinal qualities of plants, can only be explained as being accumulated and refined over generations of experience. It is also the outcome of careful observation of how the plants are part of larger ecosystems, and the consequences of ingesting them—which involves intergenerational knowledge (traditions) that do not fit Dewey's more truncated and progressively oriented experimental method of inquiry. Jared Diamond's personal account of expressing his doubts about the safety of the mushrooms that his Fore companions (a tribe in New Guinea) gathered in order to stave off hunger, which led to him being lectured about the 25 varieties of edible mushrooms and where in the forest they could be found, is a good example of the importance of what the Fore considered common sense knowledge.[29] Indeed, the test of Dewey's epistemology, as well as the coping skills of Rorty's ideal ironist individual, would be to test them in a similar situation, but without the benefit of local indigenous knowledge

As the word tradition often evokes a knee-jerk response not dissimilar to how Dewey and Rorty refer to it, it is important to cite a few examples of traditions shared within the dominant

culture. For Dewey, Rorty, and the contributors to Environmental Pragmatism, as well as other people in the literate tradition of encoding knowledge, writing from left to right on the page, spellings, use of paragraphs and capital letters are examples of traditions. Other traditions that are more easily revised include recipes for the preparation of food, legal procedures, ways of preserving privacy in communicating messages to others, rules that regulate games, and the writing of poetry—to cite just a few of the traditions we re-enact, modify, and carry forward through a process of being socialized by the previous generation. Even cutting edge technologies represent the extension of traditions built up over generations, and the rate of this technological change indicates how traditions of knowledge are sources of empowerment—just as Dewey was empowered by traditional patterns of forming words into sentences on a page, rather than having to rely upon his method of experimental intelligence in order to avoid the constraints of habits—or common sense as Rorty would put it.

Beyond Experimentalism: Why Eco-Justice Should be at the Center of an Environmental Philosophy:

The double bind inherent in the globalization of the industrial mode of production and consumption is now widely documented by studies of rapid changes occurring in the Earth's ecosystems. The melting of polar icecaps, global warming that is altering habitats and weather systems, collapsing marine ecosystems, loss of topsoil (now estimated on a worldwide basis at 37 percent), and chemicals that are changing the reproductive rates of species, are on a scale that requires asking a different set of questions than what concerned Dewey and his present interpreters. The assumption that the chief task is to use Dewey' method of intelligence in participatory settings to reconstruct the problematic sources of experience will not in itself reverse the downward trendlines in the viability of natural systems. Indeed, the root metaphors that Dewey relied upon to justify his arguments that experimentally grounded ideas always lead to a progressive form of change also underlies the Industrial Revolution that, in its digital phase of development, is now being globalized—and which will only accelerate the deepening crisis. Dewey's method of experimental inquiry, with its emphasis on the widest possible participation of the people affected by the problem (such as health problems resulting from chemically contaminated workplaces and neighborhoods), has a limited usefulness. It can also be used in eco-management approaches to identifying the causal relationships between human

activities and changes in natural systems—such as the decline in salmon populations and the contamination of ground water.

But Dewey's epistemology is totally inadequate for affecting the deep cultural changes that must be made if we are to reverse the unsustainable human impact on natural systems. In fact, the globalization of his epistemology, which appears as a natural extension of the arguments of Dewey and followers such as Rorty, will exacerbate the ecological crisis by undermining cultural diversity—and thus the forms of knowledge and values that are the basis of less consumer dependent lifestyles. The basis for this criticism can be seen more clearly if we consider whether Dewey's view of the educational process can be used to address what I shall call eco-justice issues. First, however, it would be helpful to reiterate several key features of his thinking about education. His primary concern was to educate students and adults in the method of intelligence, and thus to increase their efficiency (growth) in the ongoing process of reconstructing experience. This required replacing cultural diversity with his synthesis of democratic decision making and experimental inquiry. To reiterate another point ignored by Dewey and his followers, Dewey's view of democracy requires a process of colonization,with his interpretation of intelligence and participatory decision-making becoming the new standard of progressive citizenship.

One of the primary challenges today is to reduce our dependency upon consumerism and technologies that have an environmentally disruptive impact. This can also be understood as the need to reduce the commodification of knowledge, skills, and relations—which represents the relentless spread of industrial culture. The industrial approach to education, agriculture, entertainment, healthcare, as well as every other aspect of daily life—from personal grooming to computer mediated thought and communication—is part of a cycle that turns nature into a economic resource to be extracted, processed, packaged and sold in shopping malls, and returned after a limited use to the environment as toxic waste and landfill.

Globalizing the consumer lifestyle, which is represented as enhancing the individual's material standard of living, is actually based on experimental modes of inquiry learned in universities and public schools, and which is the basis of the new technologies—including the technologies used to manipulate consciousness so that young people turn against their cultural traditions in order to embrace the new consumer fads. The rapid merging of scientific research and corporate values is only the latest manifestation that the method of experimental inquiry

that Dewey placed so much faith in can be used in destructive ways. Making eco-justice the primary focus of the educational process requires an entirely different mind-set than what we now find being promoted in our universities and public schools. The need to take eco-justice issues seriously is based on both moral concerns as well as ecological imperatives. That is, if we do not undertake radical educational reforms that replace the current emphasis on promoting forms of education that expand the economy with regenerating the capacity of cultural groups to live in more self-sufficient and interdependent ways we will continue to experience the rapidly diminishing capacity of ecosystems to support life as we know it.

The four aspects of eco-justice most relevant to considering the nature of the educational reforms that must be undertaken include the following: (1) the need to eliminate eco-racism that occurs at the level of neighborhoods and communities, as well as across national boundaries; (2) the need to reduce the disparity of wealth between the North and South, and which results, in part, from resource extraction and the policies of the World Bank and other international agencies that are designed to integrate non-Western cultures into the world economy; (3) the need to strengthen the attenuated traditions within communities and cultural groups that enable them to live less consumer dependent lives; (4) the need to pursue lifestyles that ensures that future generations will inhabit viable environments that allow them to live morally coherent and symbolically rich lives.

Dewey recommended educational reforms that reflected the challenges of his era—as he understood them. His followers are recommending essentially the same educational reforms, supplemented by the small group who are addressing the ecological crisis by making the case that Dewey is not an anthropocentric thinker. However, if we take seriously the argument that consumerism and the relentless search to exploit new markets for the new technologies are major contributors to the ecological crisis, the nature of educational reform becomes radically different from how Dewey understood it. Reducing dependence on consumerism will lead to a reduction in the toxic waste and thus to a reduction in levels of illness among marginalized ethnic groups who have had chemical plants and waste dumps placed in or close to their neighborhoods. It will also lead to a reduction in the extraction of resources from Third World cultures, and in the pressure to integrate them into the global economic system. And it will improve the prospects of future generations.

The alternative to the present cycle of creating greater dependence upon consumerism, as Ivan Illich and others have been telling us, is to foster the skills, knowledge, and relationships that enable individuals, families, and communities to be more self-reliant. But this involves nurturing the forms of knowledge that our public schools and universities have relegated to low status by omitting them from the curriculum. It also involves recognizing that Dewey's experimental form of intelligence is only one of among many—and not necessarily the most important one. Knowing how to grow vegetables and prepare a meal—along with the ceremonial practices that transform the meal from an ordinary individually centered experience into one that creates a sense of connectedness to a larger whole, possessing the skills to make or repair something (e.g., clothes, furniture, dwelling), developing personal talents in the expressive arts and sports, knowing the medicinal qualities of plants and the spiritual disciplines that have proven to be an effective part of healing, and so forth, have a smaller ecological impact than the industrial approaches glamorized in the media and in our educational institutions. The key point is that knowledge of meaningful activities and the development of skills that contribute to more self-sufficient lifestyles are examples of traditions that are passed on through face-to-face relationships. They are kept alive and modified as part of the intergenerational experience of the family and community. Recipes are handed down as part of an intergenerational stock of knowledge; so is knowledge of how to maintain a garden, play a game, write a poem, use certain plants to ease an illness, build a dwelling (especially a vernacular dwelling that uses local materials, skills, and meets the needs of the community), mentoring a child, and carrying on a conversation that may be raised to the level of dialogue. These traditions, as pointed out earlier, are not static. If we observe them being passed along we will notice how they are adapted in ways that fit the individual's skills and way of interpreting them. These traditions represent encoded knowledge, in some cases wisdom, that has been tested and refined over generations of experience—often in ways that reflect the influence of the local landscape and life forms. Some of these traditions may become rigid and out of touch with changes in the environment and community—but this is because people fail to adapt them to the changing circumstances or find special advantage in perpetuating traditions that were wrongly constituted in the first place. As Shils points out, traditions never perpetuate themselves; rather they are perpetuated by living human beings—which opens the door to all kinds of abuse and misinterpretations.

The challenge is to identify the traditions that contribute to morally coherent communities and cultural identities—and that have a smaller ecological impact. Many of the non-commodified forms of knowledge, skills, and relationships within families and communities, and which vary among cultures, do not fit Dewey's narrow criteria for what constitutes the exercise of intelligence. Where intergenerational knowledge involves refining and updating what has been proven in the past, Dewey wants each generation to view ideas as "anticipatory plans and designs which take effect in concrete reconstructions of antecedent conditions of existence."[30] This is a reasonable expectation for traditions that are no longer useful or have served as part of a network of oppression. But Dewey's emphasis on reconstructing traditions does not take account of the multiple ways in which the non-commodified aspects of daily life are passed along and renewed. The problem with Dewey's narrow definition of what constitutes knowledge can be seen by comparing such statements as "knowledge which is merely a reduplication in ideas of what exists already in the world may afford us the satisfaction of a photography, but that is all"[31] with the process of mentoring. Mentoring is usually an intergenerational relationship with many dimensions—passing on knowledge refined over generations of experience, the accompanying narratives that contribute to the development of identities and character, demonstrating the difference between a high level of skill and more formulaic work. It also involves going beyond mastering what the mentor has to teach to expressing a higher level of talent that has elements of originality. It is not, in short, a relationship that fits the negotiating process that accompanies Dewey' experimental approach to reconstructing experience.

Dewey's method of intelligence, as pointed out earlier, would be highly useful in educational settings where the sources of environmental pollution need to be identified and corrected through democratic procedures. While incorporating Dewey's approach to problem solving in the area of eco-racism and in examining such issues as the connections between corporate values and the destruction of local economies, an educational process that addresses other eco-justice issues would need to be based on an understanding of the different ways knowledge is encoded and renewed in the life of the community—and, most importantly, the differences in cultural ways of knowing. Perhaps the most critically important eco-justice issue that can be addressed through a radically reformed approach to the curriculum is the need to reduce the current trend toward greater dependence upon consumerism to meet daily needs,

This has several curricular dimensions. The first would be to have students document the many ways they are dependent upon consumer products in the course of a day, and to also document the multiple ways consumerism is promoted through the media and through such other channels of communication as the layout of shopping malls and design of buildings. Students would also be encouraged to document the monetized relationships they have during a day. This approach sounds very Deweyian; but the other part of helping students understand the cultural alternatives to commodified activities and relationships requires an understanding and appreciation of traditions that goes against the grain of Dewey's basic epistemological biases. The second aspect of curriculum reform would be to have students survey within their own neighborhoods and communities the range of face-to-face, intergenerationally based activities, relationships, and forms of knowledge that have not been commodified. The focus of this survey would include the dominant culture, as well the minority cultural groups that many students are still rooted in. There are several purposes for learning about the non-commodified aspects of the diverse groups found in most neighborhoods that still retain traditions distinctive of their mother culture, which range from Latino, Indigenous, and Japanese-American to Mennonites, Mormons, and other faith based groups. The first is to understand, and, in many instances, to valorize their traditions of intergenerational responsibility that contribute to morally coherent communities, and that represent examples of individual, family, and communal self-sufficiency. The sense of being marginal in relation to the dominant materially oriented culture undermines the intergenerational connectedness within many of these groups; thus the need to communicate a recognition that their approaches to community that contribute to reducing the rate of environmental degradation is vitally important. The second reason for learning about the non-commodified forms of knowledge, relationships, and activities carried on within these diverse groups is that it will assist students in recognizing alternative possibilities for living less consumer dependent lives. Learning who the mentors are in different cultural groups and the nature of activities that develop personal talents while creating a sense of community are essential to participating in the intergenerational life of a community.

The emphasis on involving students in the non-commodified activities has another implication that cannot be taken into account by the followers of Dewey's narrowly conceived epistemology. As pointed out earlier, Dewey did not recognize the profound differences in cultural ways of knowing and mythopoetic narratives. He divided the world's cultures into two

categories—those that adhered to fixed ideas and values, and relied upon a spectator approach to knowledge; and those that relied upon an experimental mode of inquiry. For a philosopher who placed so much emphasis on the experiential ground of inquiry, it is important to note that he did not take seriously the forms of community, moral reciprocity, and wisdom of human/Nature relationships among the indigenous cultures that shared the bioregion he grew up in. Nor did he concern himself with whether his category of cultures mired in a spectator approach to knowledge really made sense in terms of the Japanese, Chinese, and Islamic cultures he visited.

Contrary to Dewey's position, which has not been corrected by Rorty or Eldridg, nurturing existing differences in cultural ways of knowing becomes vitally important to reversing the downward trendline in the viability of natural systems. One of the effects of globalization is to undermine cultures that developed complex symbolic systems for understanding relationships within the human community, and between the human and natural communities. However, many of these cultures are now actively resisting being drawn into the western system of technological dependency and corporate values. On the local level that is part of the student's daily experience, there are many cultural groups that have not entirely assimilated into the mainstream individually-centered, consumer dependent lifestyle. These cultural groups, many of which have been economically and politically marginalized, have a sense of identity as a community because they carry on the intergenerational traditions of knowledge and moral values. These traditions may be so attenuated that they now exist only in the form of traditional foods, ceremonies, and uses of herbal medicines. But many of these cultures are struggling to keep alive their language and thus their basic way of understanding relationships—and the attributes of the participants in these relationships. Many of the languages of indigenous cultures encode ways of understanding relationships with the natural world that predated by thousands of years Aldo Leopold's land ethic.[32]

An eco-justice curriculum should introduce students to the range of cultural groups that are now mixed together in urban and rural settings. In addition to learning about differences in intergenerational forms of knowledge, and how these forms of knowledge influence patterns of moral reciprocity within their communities, students also need to consider the traditions that represent alternatives to the hyper-consumerism that permeate every facet of the dominant culture. Valorizing the non-commodified traditions of these diverse cultural groups may help

strengthen minority students' identification with the traditions of their parents, as well as provide students from the dominant culture with an understanding of the alternatives to environmentally destructive activities and values. The purpose would not be to borrow from these cultures, which too often turns into the economic appropriation of their traditions. Rather, it is to enable students to gain a different perspective on what remains of the non-commodified traditions within the dominant culture.

The failure of Dewey's followers to recognize how taken-for-granted root metaphors that had their origins hundreds (even thousands of years ago in the case of anthropocentrism and patriarchy) frame current thinking can be seen in how a Deweyian approach to curriculum is understood. In addition to Dewey's emphasis on the curriculum emerging from the ongoing experiences of the community, his insistence that inquiry begins with a problematic situation (which he understood in terms of explicit awareness) further limits what should be the focus of the curriculum. The root metaphors that unconsciously influence thought and behavior are not likely to be examined in an educational process based on Dewey's epistemology and taken-for-granted assumptions. A good example of how a Deweyian view of learning represents a surface approach to problem solving can be seen in the process of eco-management where the scientific method and, in some instance, participatory decision making are the modus operandi. This approach seldom involves an examination of the root metaphors of anthropocentrism, mechanism, progress, and economism that are the primary sources of the problem. When these root metaphors are not changed, the problem simply reoccurs at a later date, and on a larger scale

An eco-justice oriented curriculum needs to encourage students to examine how the taken-for-granted root metaphors influence the areas of cultural experience that create the double bind where our approaches to progress undermine the viability of natural systems. In addition, students need to examine how these root metaphors influence our understanding and use of science and technology. Questions that will contribute to democratizing the uses of science and technology include the following: How does modern science and technology differ from the ways of explaining, predicting and controlling natural phenomena in oral cultures? How do different technologies influence relationships and the ability to live more self-sufficient lives? How do the prevailing cultural assumptions influence the kinds of technology that are developed? Who benefits most from different forms of technology? What traditions are

displaced by different technologies, and do the displaced traditions result in new forms of dependency? What is the form of individualism required by different forms of technology? Which technologies contribute to globalizing an ecologically unsustainable lifestyle?

A similar set of questions can be asked about the culturally specific root metaphors that underlie the practice of western science and it legitimating ideology: What are the assumptions that underlie the scientific method? What forms of knowledge and aspects of human experience is it unable to address? Does the use of the scientific method to establish moral norms and to delegitimate the mythopoetic narratives that are the basis of moral values exceed the explanatory of the scientific method of inquiry? What was the role of science in the development of the Industrial Revolution, and is it now at the center of current efforts to bring the most basic biological processes under the control of an industrial mode of production and consumption? What are the appropriate limits of scientific inquiry, and how can it be determined when scientists cross the line that separates competent judgment and being an ideologue and futurist thinker? What can be legitimately explained by the theory of evolution, and when does it become an ideology that gives the appearance of scientific legitimacy to processes of colonization and the right of elite groups to further advantage themselves?

These are difficult but necessary questions that also need to be part of an eco-justice curriculum. Addressing these questions will help students gain a better understanding of how the high-status knowledge that leads to greater dependency upon the products and processes of the industrial system now moving into its digital phase undermines the face-to-face, intergenerational knowledge that represents the alternative pathway that we must rediscover if we are to reduce the impact of humans on the environment. It will also help students recognize that science and technology cannot address issues of personal meaning, moral relationships, and renewing patterns of self-sufficiency within communities and cultural groups. Students may also gain insight into the role that mythopoetic narratives play in helping people understand their place in the cycles of life, and in recognizing the limits of a life based on hubris and misrepresentations of fundamental life sustaining relationships. Dewey and his followers might claim that his approach to education would also lead to deep inquiry into these questions, but unfortunately his approach to problem solving never reaches the level of examining the guiding cultural assumptions; and his emphasis on democratizing the process of inquiry took-for-granted that the scientific mode of inquiry itself did not need to be problematized. It should

also be kept in mind that Dewey argued against the mythopoetic narratives that could provide an alternative perspective on the limits of science, technology, and the hubris of experts. In effect, he aligned himself with the progressive cultural forces that are, in the name of higher values of democracy, experimental inquiry, and progress, accelerating the rate of environmental degradation. To argue that he is an environmental philosophy is a misguided effort that reflects the failure to question the assumptions that Dewey took for granted.

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