

RESCUING DEWEY FROM ANTHROPOCENTRISM

Tom Colwell

Recent critics of Dewey's naturalism¹ have argued that while the inclusion of humans in nature which is central to his naturalism is suggestive of an ecological model of the foundations of education, it nevertheless provides no answer to the question of how teaching and learning which recognizes the interconnectedness of human and non-human activities is in any better position to avoid the anthropocentric disregard and misuse of both human and non-human environments that has characterized the modern era. Educators who have been attracted to Dewey's naturalism have assumed that when awareness that humans are part of nature percolates into educational studies, a moral imperative of greater respect for humans and non-humans alike will go with it. But will it? Will students exposed to studies which emphasize that human life is enmeshed in complex non-human networks learn that what is good for humans depends on the integrity of those networks? Or, already heavily dosed with the blandishments of a global technological wonderland, will they learn that the very knowledge of human-non-human interdependence which Dewey's naturalism encourages, reinforces and informs their aspirations to extend indefinitely the world they are already familiar with? Will they, in other words, use their new found ecological knowledge to adjust human activities to the needs of the system of nature, or will they use it to promote ever more efficiently narrow human interests alone?

Dewey's way of dealing with anthropocentrism is best indicated by focusing on his conception of science. Dewey had long argued that science was primarily a general method of knowing and learning that extended beyond the subject-matters of the sciences to include human affairs as well. While non-human environmental subject-matters were not in the forefront of his thinking, there are passages scattered throughout his writings - and especially in his later work -

where non-human environment is made an integral part of any determination of the adequacy of human moral and social judgements.² Hence, it may be said that science, for Dewey, guards against anthropocentrism through observation and criticism of the interactions and transactions between humans and non-humans.

This broadening of the scope of science is the distinguishing feature of Dewey's idea of science which sets it apart from conventional associations of science with the natural sciences, and enables science to treat moral and social concerns as intertwined with those with the non-human environment. In this sense, Dewey's conception of science may be called ecological, the philosophical basis of which Dewey's collapsing of the nature-culture distinction which had been the chief dualistic pillar of all modern philosophy and modern thought and culture in general. With nature and culture joined in a single subject-matter, it follows that the corollary distinction between the sciences and humanities is also collapsed, thus opening the way for scientific study of humanistic subject matter. This means both the human moral and social activities may be treated according to the same method of observation, criticism, and hypothesis as are plants and atoms, and that such judgments of moral concern have access to the subject-matters of the natural sciences as resources which contribute to their outcome. It is this interweaving of subject-matters and methods, both formerly separated in the sciences-humanities typology, which gives Dewey's conception of science its ecological character, i.e., its ability to interconnect human and non-human behaviors, and thereby resist anthropocentric temptations which inevitably arise when humanistic moral pretensions are *disconnected* from the non-human environments.

These considerations would seem to put Dewey in the clear as far as anthropocentrism is concerned. If by anthropocentrism we mean the arbitrary imposition of human bias which privileges certain humans to the exclusion of both other humans and non-humans, then Dewey's ecological conception of science seems ideally suited to controlling human bias and subjectivity. But to one of Dewey's most

persistent critics, C. A. Bowers, Dewey's view of science as Dewey presents it is wholly Western in outlook, ignoring, in its single minded advocacy of science as the only method of gaining knowledge, the views of the many non-Western, traditional cultures whose ways of life, based on centuries of environmentally benign and spiritually sympathetic practices, offer a much needed corrective to Dewey's exclusive reliance on a science which all too easily lends itself to the interests of Western global capitalism. In fact, Bowers' main contention is that Dewey's science, for all its emphasis on ecological interconnectedness, cannot escape the Western habit of aligning itself with rampant technological and economic progress. Hence, the importance in teaching and learning of introducing alternative cultural views as a more effective way of counteracting Western anthropocentrism.

Bowers' criticism is puzzling and I think far-fetched. There is not in principle any opposition between Dewey's scientific approach to education and the study of non-Western cultures, which can and should be critically observed and interpreted in the same manner Western culture is. The fact that Dewey himself paid little or no attention to traditional culture is beside the point. The method of learning he was advocating is capable of treating any and all cultures with reasonable impartiality. No doubt Bowers would say this is question begging. His point is that science in the West is incapable of fairly representing non-Western culture because of its long standing ties with a culture of unlimited progress. But the basic idea of Dewey's conception of science is to treat all ideas as hypotheses, an idea that has met resistance in Western societies. Does the notion that ideas are hypotheses carry with it Western cultural baggage? Perhaps to an extent it does, and it is easy to see that it would be resisted in any culture which wants to protect certain ideas from scientific scrutiny.

There is no question that sciences in the West are often in the pay of corporations, the military, and governments. But again Dewey's main philosophical argument rests on a distinction between the sci-

ences and science-as-method. The sciences have had a long history in the West and their achievements may be debated in respect to their social and moral consequences. But as Dewey often pointed out, there has been little experience with science as a general method knowing in human affairs. Science as an ecological method, a method that includes humans and non-humans is, like environmental enlightenment itself, an ideal we are only beginning to realize.

What are the alternatives to Dewey's ecological conception of science in education? How are we to ground knowledge and learning in some other way? Either we remain with the modern *status quo* and continue to rely on the dualism of the science and humanities to frame educational studies, or we adopt Bowers' extra-scientific attempt to draw upon the wisdom of non-Western cultures. With regard to the latter, it is interesting that Bowers never addresses the really important question that his advocacy involves - viz.: How do we know *without reliance on science*, which traditional non-Western practices to adopt? All of Bowers' examples conveniently conform to generally accepted environmental knowledge as confirmed by the Western science he is suspicious of; nor are any of his examples cases of environmentally destructive practices of which traditional cultures have their share. So unless criteria for selecting exemplary non-Western cultural practices are derived from extra-scientific *a-priori* sources - which is an open invitation to cultural relativism - we are brought back to science as the best method to guide education and culture.

To the extent my arguments in Dewey's behalf have been convincing, the conclusion might be drawn that Dewey needs no rescuing from anthropocentrism, that his position was satisfactorily protected from that malady all along. But Dewey is still vulnerable to anthropocentrism is his ambiguous use of "nature." In this respect, he is no different from other moderns (and post-moderns, too). While Dewey rejected the centerpiece of modernity, the nature-culture distinction, like most moderns he continues to employ "nature" approvingly as the central receptacle into which humans are merged. Dewey's use of "nature" and "culture" to express this merger unwittingly

tingly reproduces the connotations of separate realities these terms powerfully convey, and thus ambiguously keeps alive the dualism from which the idea of an inclusive nature is intended to provide relief. In educational terms, humans-as-part-of-nature implies a unified subject-matter which is immediately pulled apart when it is articulated by the only terms at our disposal, "nature" and "culture." Students thereby learn the modern paradox: they are part of a nature from which the conventional meaning of "nature" excludes them.

The ambiguity of "nature" is Dewey's philosophy compromises his naturalism by playing on "nature's" double meaning - inclusive and exclusive of humans - simultaneously. In such a setting the possibility of anthropocentrism is continuously raised when the exclusionary, dualistic connotation of "nature" is entertained - that is, when "nature" is understood, as it commonly is, to indicate a separate non-human world. It is these occasions which powerfully reinforce the modern proclivity to impose and follow the dynamic forces of unbridled technological development.

In order to correct Dewey's ambiguous use of "nature" and thereby strengthen his anti-anthropocentrism, I propose to draw on Dewey's idea of transaction, which he developed over the last 20 years of his life, and fully expressed in his final book, *Knowing and the Known*,³ written with Arthur Bentley.

There are two main components of Dewey's transactional philosophy which bear on the question of anthropocentrism. The first is the meaning of "transaction" itself. The best way to express this is by contrast with the more familiar notion of interaction, which has been the characteristic mode of knowing and learning in the modern West. Interaction assumes the existence of at least two things or objects and their human knowers or subjects. The subject interacts with the object by observing it or manipulating it in some way. The focus of interactive knowing and learning is therefore the epistemological exchange between subject and object.

Dewey had long sought to avoid the dualistic implications of

the subject-object typology by reinterpreting interaction using the biological model of organism and environment. But in later life he came to see, with Bentley's help, that "interaction" insufficiently avoids dualistic connotations. As long as this connotation remained in place, Dewey's naturalism was indeed vulnerable to the human centeredness of modern epistemological dualism.

Hence, the second feature of transactionalism was a program of language reform which focused not only on "interaction" but, in *Knowing and the Known*, was extended to a wide range of terminology in the modern dualistic tradition. "Transaction," a term first introduced in a scientific context by Clerk-Maxwell in 1877 to indicate that energy forces in electromagnetism had to be understood as a system, was Dewey and Bentley's choice to not so much replace "interaction," as to subsume it under the broader idea of an environmental system of events which contained subject and object as individuals. Transactional knowing and learning therefore proscribed an epistemological setting which called attention to the human and non-human environments frequently ignored in the interactive preoccupation with subject and object alone.⁴

But awareness that knowing and learning includes the environmental systems in which subject and object reside, still does not fully eliminate the threat of anthropocentrism to Dewey's naturalism. It is still possible to argue that expanded knowledge of environmental systems will simply feed the unquenchable thirst for ever greater human exploitation of non-humans and other humans.

To further guard against this possibility, I would introduce an additional terminological change, one which, considering its centrality to their naturalistic position, it is surprising Dewey and Bentley did not make. This has to do with the word "nature" itself.⁵ I have already mentioned that Dewey uses "nature" ambiguously and in doing so reproduces dualism unwittingly. It therefore seems appropriate to suggest an alternative to "nature" as a means of eliminating this ambiguity.

This alternative I have in mind is “earth system,” though I am sure there are other equally deserving candidates.⁶ “Earth system” has the advantage of drawing attention away from the dualistic two-worlds connotation “nature” inevitably implies, while emphasizing a single human-non-human reality. In doing so, “earth system” challenges educators to design studies which stress that, however humans may differ from other humans and non-humans, they are bound together in a common family whose moral integrity depends on how well they comprehend their familial ties, and on their ability to employ this understanding to resist the snowballing effect of modern progress.

Since the dawn of the modern era, nature has been thought of as a world apart from humanity, reinforcing its sense of privilege and superiority.⁷ To try in education to free ourselves from this dichotomy is a task easier said than done, and it will not be accomplished merely by changing a few words in our language.⁸ To begin to speak of an earth system in educational work is a small step in this direction. But if it helps us see our many interactions as part of a larger transactional human-non-human system, it will also be a giant first step. To inaugurate a new broader vision of our relationships to ourselves and other forms of life is the object of Dewey’s idea of transaction. Such a vision cannot eliminate anthropocentrism, but it can control it through ongoing experimental observation and criticism across disciplines and behaviors formerly segregated which necessarily incorporates the views of different cultures, genders, and species in democratic dialogue.

New York University

End Notes

1. Cf. C. A. Bowers, *Education, Cultural Myths, and the Ecological Crisis*. Albany, NY: SUNY Press, 1993, Ch. 3, pp. 87-105; cf. also, Paul Morgan, “Reconceiving the Foundations of Education: An Ecological Model,” in *Philosophy of Education 1996*, ed. Frank Margonis (Urbana, Ill.: Philosophy of Education Society, 1997), pp. 294-3-2. I am

indebted to Morgan's paper for criticisms of my earlier views, which prompted me to write this paper.

2. Cf. for example the following passage in Dewey's *Logic*: "...the existential conditions which form the physical environment at every point into the constitution of socio-cultural phenomena. No individual person and no group *does* anything except in interaction with physical conditions. There are no consequences taking place, there are no social events that can be referred to the human factor exclusively. Let desires, skills, purposes, beliefs be what they will, what happens is the product of the interacting intervention of physical conditions like soil, sea, mountains, climate, tools and machines, in all their vast variety, with the human factor. The theoretical bearing of this consideration is that social phenomena cannot be understood except as there is prior understanding of physical conditions and the laws of their critical interactions. Social phenomena cannot be attacked, *qua* social, directly. Inquiry into them, with respect both to data that are significant and to their relations of proper ordering, is conditioned upon extensive prior knowledge of physical phenomena and their laws." *Logic: the Theory of Inquiry*. New York: Henry Holt and Co., 1938, pp. 491-492.
3. John Dewey, Arthur F. Bentley, *Knowing and the Known*. Boston, MA: The Beacon Press, 1949.
4. Dewey's and Bentley's account of interaction and transaction occurs in chs. 4 and 5 of *Knowing and the Known*.
5. In *Knowing and the Known*, Dewey and Bentley occasionally use "cosmos" as a synonym for "nature," but they do not suggest it or any other term as a replacement for "nature."
6. For example, "cosmos" (as mentioned in footnote 5).
7. The primacy of nature in modernity is discussed throughout Bruno La Tour's *We Have Never Been Modern*. Cambridge, MA: Harvard University Press, 1993.
8. For an interesting discussion of the pros and cons of changing conventional language, with particular reference to "nature," Cf. Alice E. Ingerson, "Tracking and Testing the Nature-Culture Dichotomy," in Carole L. Crumley, ed., *Historical Ecology: Cultural Knowledge and Changing Landscapes*. Santa Fe, NM: School of American Research Press, 1994, pps. 43-66.