Social ecology and environmental education

Drew Hutton

Abstract

A world view is emerging in areas like peace education, environmental education, justice education and development education which cannot be understood simply by applying old assumptions to these areas. This world view involves a different ethical framework, a different epistemology and a different way of functioning in order to achieve goals. I call this new world view social ecology, a philosophy which has emerged as a result of the threats to our planet and which takes as its starting point such principles as ecological sustainability, non-violence, grass-roots democracy and social equality.

A geography text used in Queensland schools in the 1930s had the following to say about nature:

We nowadays look upon the globe as the home of man, as the mighty stage upon which man is called to play his part. He is limited by the forces of nature; but he controls and directs those forces so that they become ever more obedient to his will. We still see the contest between man and nature in those regions where tropical heat and abundant moisture have enabled the soils to bear dense forests. There, for a long time, vegetation seemed to win; man was checked in growth in body and mind; his faculties are but little higher than those of the apes that share or contest the forest domain with him.

Gradually, however, the conflict between the giant plants and man is being decided in favour of man: the trees are tapped for rubber, and are hewn down ultimately to become chairs and tables in distant lands. The forest gives place to grass that more readily answers man's purposes. Away from the tropics man's control over vegetation is so complete that he preserves in his parks and pleasure grounds remnants of the plant life that once dominated him. (Connors: 1984).

I have, at times, shown this to my students at college in order to generate a discussion on how world views are reflected in school texts and each time they usually characterise the passage as "quaint" and, certainly, anachronistic. However, further questionining usually reveals that the students are reacting primarily to some of the writer's terminology and, when presented with a more contemporary statement of the same ilk, they are by no means as certain of their ground. One such passage is from James Christian's *Philosophy:*

In the life/death struggle between man and nature ... the question has been ... who would win: Man or Nature? Man has won - or is winning ... Man has loved his earth; it nourished him. But he has also hated it for its relentless attempts to annihilate him ... Man is on the threshold of setting controls over ever larger forces of nature — climate and earthquakes, for instance. The control of life and evolution is near ... Man may eventually establish control on a cosmological scale. We might alter the orbit or tilt of the earth ... man is now in process of taking control of his own evolutionary destiny and, by default, of all other living creatures on this planet ... (Devall and Sessions: 1985).

The notion that nature is, at worst, a hostile force and, at best, a resource to be exploited must strike a chord with any person growing up in a modern industrial society in our era. Since the beginning of the Industrial Revolution unlimited economic growth has been an assumed goal of every industrial society — regardless of its dominant ideology — and has, increasingly, been the major goal of countries in the Third World. It was not until nature began to send out warning signals in the form of dead fish in our streams, dying trees in our forests, salination of our soils and so on that such assumptions as the desirability of economic growth have been challenged. However, those who have successfully interpreted this message are still only a minority and my students are less likely to assign the judgement of "anachronistic" to the two passages quoted earlier than to this beautiful statement by an American Indian chief in the 19th century:

The Great Chief in Washington sends word that he wishes to buy our land. The Great Chief also sends us words of friendship and good will. This is kind of him, since we know he has little need of our friendship in return. But we will consider your offer. For we know that if we do not sell, the white man may come with guns and take our land. How can you buy or sell the sky, the warmth of the land? The idea is strange to us.

If we do not own the freshness of the air and the sparkle of the water, how can you buy them? Every part of this earth is sacred to my people.

Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The sap which courses through the trees carries the memories of the red man. The white man's dead forget the country of their birth when they go to walk among the stars. Our dead never forget this beautiful earth for it is the mother of the red man. We are part of the earth and it is part of us.

A social ecology perspective

Social ecologists offer a radical critique of environmental problems, In its quest for root causes of these problems social ecology does not stop with industrialism's obsession with economic growth and "man's" dominion over nature but it also looks at the

Drew Hutton is a Lecturer, Social Studies Department, Brisbane College of Advanced Education.

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overly human-centred nature of philosophy (including radical humanism), the epistemologies inherent in scientific rationality and patriarchy's preoccupation with domination.

For "ecological field workers" (Naess: 1984) (and by this I mean not only environmental activists but also political and social activists of all kinds, health workers, teachers and so on) it is convenient to divide a social ecology framework into three dimensions. These are:
1. Ethical
2. Epistemological
3. Functional.

1. First, let us look at the ethical dimension. More is required of the ecological field worker than a shift in loyalties. Nothing less than a personal transformation is necessary if people are to lead lives which are consistent with the ethics of social ecology.

This sounds harsh and demanding but should not be seen as a "hair shirt" approach. In fact, an ecological lifestyle should be more relaxed, more in-tune with natural harmonies, more social and more peaceful. The norms of such a system of ethics would include the following:

- A rejection of man/environment dualism in favour of a holistic perspective which emphasises the relationship between the two (and between all things) and the need for humans to see themselves as **part of** nature.
- Adherence to the notion of sustainability. Humans need to act in a way which enhances the diversity, complexity and mutuality of natural systems instead of acting with the brute simplicity of the industrial machine. We need to develop an anti-consumer ethic which allows us to appreciate the finite resources of the planet and to live in harmony with nature. We also need to lead sustainable lifestyles so that working, learning and loving all help to unfold our full potential as persons. The compulsiveness, destructiveness and boredom which characterise so much of these activities in this society must be changed.
- An ecological perspective values diversity in many areas but emphasises the need for equality in social terms, including between developed and developing nations, men and women, highly educated and less educated.
- Maintaining the value of personhood against the person-annihilating forces of the state, the company, the school and the mind-numbing egoism of consumerism. This norm is not in contradiction with that of social equality outlined above but it is opposed to how state socialist societies define equality and to the selfishness, competition and egoism enshrined in capitalist notions of individualism.
- An emphasis on local autonomy and decentralisation in human affairs. Social ecologists accept that social organisation is most compatible with nature when it is small scale and based on principles of direct democracy. Besides, when a local community makes a decision about its environment, it then has to live with it.

2. In developing an epistemological basis for social ecology it is necessary, firstly, to criticise the value-laden quality of much of modern science. One such writer is Fritjof Capra:

> *With the rise of Newtonian science, finally, nature became a mechanical system that could be manipulated and exploited, together with the manipulation and exploitation of women.* (Capra: 1982).

These epistemologies are, then, what Murray Bookchin calls "epistemologies of rule" (Bookchin: 1982) and are used to justify the domination of nature by human society and the domination of some people by others. According to Capra:

> *Since Bacon, the goal of science has been knowledge that can be used to dominate and control nature, and today both science and technology are used predominantly for purposes that are profoundly anti-ecological.* (Capra: 1982).

This epistemology can easily be seen to underlie what is often termed technocratic ideology with its commitment to hierarchy, competition, domination and economic growth. Ironically, just as Newtonian physics laid the basis for much of these epistemologies, so the "new" physics, which was pioneered by people like Einstein, opened the way for a new ecological epistemology which emphasises such things as the interrelatedness and complementarity of all things, the view of nature as a constant flux and flow of energy transformations (rather than as discrete, material particles), and which must include the consciousness of the observer. To this should be added the insights of the mystical traditions, especially those of the Eastern religions such as Buddhism and Taoism.

3. Finally, ecological field workers attempt to work with others in a way which is consistent with the ecological vision. Both the women's movement and the nonviolence movement have, over the years, experimented with a variety of organisational techniques which have become an established feature of the movement in general in the last few years. These include an emphasis on consensus decision making, a minimum of hierarchical positions and a maximising of sharing responsibilities, respect for the contributions of all, the use of networks rather than executives for co-ordination and attempts to overcome dogmatism in one's beliefs.

Social ecology and education

Over the last few years radical exponents of both environmental and peace education have developed approaches to curriculum which fall easily within the parameters of social ecology. Writers like David Hicks from the British Peace Education Network emphasise the broad nature of peace education and the necessity of including such concepts as justice, human rights, ecological concern and vision in its scope, Hicks has attempted to sum up the outcomes of educating for peace in Figure 1 which, with slight adaptation, could serve quite well as a model for environmental education based on a framework of social ecology.

Of course, if one is teaching *for* peace or *for* the environment or *for* justice, then there should be a close relationship between the outcomes being sought and the

Figure 1:
Ecological Education

SKILLS

1. Critical thinking
2. Co-operation
3. Empathy
4. Assertiveness
5. Conflict resolution
6. Political literacy

KNOWLEDGE

Issues to do with:
1. Conflict
2. Peace
3. Justice
4. Power
5. Gender
6. Race
7. Ecology
8. Futures

at a variety of scales
e.g., personal, local, national, global.

ATTITUDES

1. Self-respect
2. Respect for others
3. Ecological concern
4. Open-mindedness
5. Vision
6. Commitment to justice

(Hicks, 1986).

means which teachers use to achieve them. Therefore, the principles enshrined in libertarian education and radical nonviolence should be an integral part of the teaching/learning relationship.

Since social ecology attempts to respect the integrity of the learner, then ecological field workers in education should develop work programs which are inquiry based and student centred. Therefore, I have outlined a number of questions which can provide the framework for a study of the topic of wetlands. These are as follows:

1. How can we develop sufficient environmental sensitivity in students *before* undertaking a topic like wetlands so that their immediate reaction is not "Isn't it yukky?"
2. How do we persuade our students to see wetlands as a series of relationships rather than as a "thing"?
3. What social groups/forces are threatening wetlands? Why?
4. What social groups/forces support them? Why?
5. What values underlie the beliefs and actions of different groups and individuals towards wetlands?
6. How do I (the student) feel about wetlands and about, for example, the "development" of wetlands?
7. Who wins and who loses from the development of wetlands?
8. What are the different options for wetlands?
9. Do our values/government policies/institutions/social structures need to be changed to encompass my preferred option?
10. What strategies can be used by different groups and individuals (including me) to see that humans take appropriate action regarding wetlands?

Radical stewardship, social ecology and deep ecology are three philosophical positions represented in the "green" movements which have sprung up in the last few years around the industrialised world. I don't draw much distinction between social ecology and deep ecology (although perhaps the latter has more pantheistic and absolutist tendencies than the former). However, there is certainly a tension between the stewardship position and the other two which will be reflected in many future discussions and debates inside environmental groups, community groups, political parties and, of course, teachers involved in environmental education.

References

Bookchin, Murray, *The Ecology of Freedom,* Cheshire Books, Palo Alto, Calif., 1982.
Capra, Fritjof, *The Turning Point: Science, Society and the Rising Culture,* Flamingo, London, 1982.
Connors, Libby, *The Formation of Character: Queensland Schooling 1919-1939,* B.A.(Hons.) thesis, University of Queensland, 1984.
Devall, Bill and Sessions, George, *Deep Ecology,* Peregrine Smith Books, Salt Lake City, 1985.
Hicks, D., "Peace Education — A UK perspective". *Social Alternatives* forthcoming 1986.

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