Educating for Deep Ecology

by Dolores LaChapelle

"Deep Ecology is the perception of reality as relationship" Julien Puzey

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The Norwegian philosopher, Arne Naess, first differentiated "deep ecology" from the more prevalent "shallow ecology" at the Third World Futures Conference in Bucharest in 1972. He defined "shallow ecology as a fight against pollution and resource depletion: Central objective: health of the people in developed countries"; while deep ecology was "rejection of

man-in-environment image in favor of the relational, total-field image" (Naess, 1973). Although deep ecology has been evolving ever since; fundamentally, there are two underlying premises: 1) the scientific findings of the interrelationship of all systems of life and 2) the problem of anthropocentrism—

human-centeredness. In fact, in 1989 Naess went even further when he said that "environmentalism is a bad word and perpetuates the idea that the human organism or human society can really

be separated from the ecosystem."

I met Arne Naess in 1978 when we were both tutors for the New Natural Philosophy program. At that time I began working out an experiential education approach based on deep ecology. In the years since then I have done workshops in various parts of the United States, published a yearly newsletter on the subject, and lectured at various colleges—both in the U.S. and in Canada, culminating in the publication of

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Uprooting

In Part I of Sacred Land Sacred Sex, titled "Uprooting," I explain how we in the West became

uprooted from nature by contrasting our approach with that of the Chinese. To quote the leading Chinese scholar at Oxford, E. R. Hughes, "The main distinction between a western and a Chinese tradition is the western has tended to see reality as substance, the Chinese to see it as relationship"

(Hughes, 1943, p. 52).

The ultimate development of this "substance" mentality came with the onslaught of the Industrial Revolution. Using the Norwegian, Sigmund Kvaloy's term,

Sigmund Kvaloy's term, Industrial Growth Society (IGS), we can say that the IGS has defined human good as the production and buying of more "things" and this has been going on for at least the last four hundred years. It is time to turn that right around and look at human good in the context of the entire time humans have been on this earth. Human good was the finding and celebrating of ever deeper ties to the surrounding land including the animals, the sky, and the plants. This grew out of 150,000

Instead of accumulating more "things," which necessarily results in destroying the environment, we need to accumulate more understanding. From a deep ecology perspective, insecure, acquisitive individualism is the most destructive attribute of the narrowly human viewpoint. Prior to the IGS and for most of

years of hunting-gathering and continues on into the present time in the remnants of indigenous cultures.

human history, education consisted of recognizing more and more diverse patterns within the daily life of the child. This was accomplished by paying attention to how things were done both in living nature and within the tribe—no linear explanations can ever take the place of this primary way of learning. The fundamental pattern which the child was helped to see was the yearly pattern of the sun's rising and setting in that place. There are detailed accounts of how different tribes accomplished this. The Hopi, for instance, showed the child that the sun was in the summer house when it was setting behind a certain mesa. And then showed the child how the sun moved toward his winter house up a particular valley. In this way the child was initated into the seasonal progression of drought, rain, snow-all part of the knowledge needed to live there and grow corn.

Tribal people, in general, as well as the Greeks before Socrates, and the early Chinese, all made use of patterns as their basic thinking. As far as tribal people are concerned, we tend to call them illiterate but that is because we do not realize that their patterns, songs and dances are valid literature and accurate recording systems. Bill Mollison (1988) explains:

Having evolved number and alphabetical symbols, we have abandoned pattern learning and recording in our education. I believe this to be a gross error, because simple patterns link so many phenomena that the learning of even one significant pattern, is very like learning an underlying principle, which is always applicable to specific data and situations.

Mollison writes that the Polynesians used pattern maps. They "lacked scale, cartographic details, and trigonometric measures, but nevertheless sufficed to find hundreds of island specks in the vastness of the Pacific! Such maps are linked to star sets and ocean currents and indicate wave interference patterns."

Pattern recognition gives us more information than can be secured through limited rational thinking. Pattern registers on us through sound, touch, movement as well as sight-more pathways to learning. Our older brains and our body sense register these "subliminal" patterns and digest them for future use.

Continual emotions of care, love, and elation develop and fuel this type of learning. Before explaining this natural, basic way humans have learned for centuries, let's take a look at the present, aberrant education we now have.

The Ongoing Role of Sexual **Energy in Education based on the Anthropocentric Approach**

The current approach began with the ancient Greeks. The elite young men were taught by the older intellectuals in a relationship based on homosexual energy. Most of the older leading thinkers at one time were in love with the beautiful young man, Alcibiades. This elite was supported by slaves who did the daily work, which of course, meant less and less contact with basic reality for the students. The entire system was based on Protagoras's statement: "Man is the measure of all things." When Rome took over the rule of the world, they imitated the Greek system as best they could. When the Roman empire was taken over by Christianity, education continued in the same mode.

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Young men were taught by older men but the normal attraction was subverted by the imposed chastity of the Christian church thus sublimating normal sexual energy into an effort to achieve salvation from sin. This, of course, led to more intense absorption in the so-called sacred studies of the Bible. Meanwhile the real work was being done by the peasants.

This linking of learning with the church continued down through the ages in Europe. The modern compulsory education system began in Germany, which was a late-comer in the effort to become a nation state. In an effort to "catch up" with the already developed nations, an education system was enforced which required rigorous control over the students. When other nations grasped the quick results of the German system, it was copied elsewhere. England did not have compulsory education until late in the nineteenth century. D. H. Lawrence wrote that his father was of the last generation of English "not ruined by public schooling."

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John Taylor Gatto stated in January 1990, upon accepting an award naming him "New York City Teacher of the Year," that: "Our form of compulsory schooling is an invention of the State of Massachusetts around 1850. It was resisted-sometimes with guns-

The graphics in this article are by David LaChapelle and are available as earth seals from the Way of the Mountain Center.

by an estimated 80% of the Massachusetts population, the last outpost in Barnstable, on Cape Cod, not surrendering its children until the 1880s when the area was seized by militia and the children were marched to school under guard" (Plant, 1991).

Does this sound familiar? Certainly—that's how the Western European imperial powers treated all children of indigenous peoples—from the Franciscan priests in California to the U.S. government rounding up Indian children and imprisoning them in government schools.

Gatto considers this treatment as a "tearing away from family." But for most indigenous people, family included the animals, plants and the land itself. This is the real family, and children were torn out of it by modern compulsory education. And for what? To make them homogenized, easily manipulated workers for the continued growth of our Industrial Growth Society.

Education Based on Love of the Land

What is necessary, now, is to replace the perilous, merely human sexual energy fueling education with the natural love of a people for the land on which they live. Indian speeches throughout Western history are replete with references to this love, but we ignore it.

Modern day Israelis rediscovered it when they began the kibbutz experiment. Bruno Bettelheim (1969), in his study on the Kibbutz in the sixties, wrote that "the romantic attachment of their parents to Israel-

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as-idea has been translated by their children into a fierce love for a particular landscape." One example he gave was of a man who was a good father and husband (by his wife's account) but would not leave the kibbutz because he "could not bear to leave behind him the small lake where he spent nearly all his time as a fisherman—not for the fishing, but because of the beauty of the lake" (Bettelheim, 1969, p. 280).

Edith Cobb's book, The Ecology of Imagination in Childhood, documents the importance of such a deep love of place. Near the end of her book she summarizes the insights gained from her lifetime research: "In the creative perceptions of poet and child we are close to the biology of thought itself—close, in fact to the ecology of imagination, in which the energies of the body and mind as a unit, an ecosystem, and the energies of nature combine in a mutual endeavor to adapt to nature, to culture, and to the societies devised by man to embody culture" (Cobb, 1977, p. 109).

The poet, Greg Culp, writing of the importance of her work says: "Concepts and verbally recognizable experiences, perceptions which can be structurally understood in terms of cultural framework, is that which is imprinted in adult life. Whereas in childhood we perceive, absorb, flow into and become, the experience of environment, in acceptable adulthood we're encouraged to hack out piecemeal those portions of our experience deemed acceptable by some perverse consensus, which in turn takes its form not just from what is mutually beneficial but incorporates the cultural anxiety, fear and neurosis" (Culp, 1985).

For the past ten years Rick Medrick and I have been working out a way of education, which is based on the intense love for the land, developing out of particular experiences on our program called "Breaking Through." Essentially, we approach the outdoor experiences of white water rafting and rock climbing from a totally different perspective. For example, after preliminary Tai Chi-type rock climbing instruction on boulders, we eventually take our people up the most difficult 14,000-ft. peak in the state—unroped. All along we have been developing the concept that it's not the human who does it. At first, it's the boulder which "affords" the foot a hold on it. Later on the mountain, when the going gets scary, we don't say "you can do it." Instead we help people to see that the mountain

"affords" their passage. And when they have done a particularly difficult move we say the mountain lets them do it. Such experiences develop a very intense love for the mountain and often changes their lives.

Our normal culture, based, on individualism, teaches people that they must *strive* and *try* and *do*, creating continual low-grade stress. It's them against their entire environment including the natural one. A

Canadian and member of the Odawa tribe, Wilfred

Pelletier, put it very well in his book No Foreign Land. He wrote, "And that's because in white society just being born is a putdown" (Pelletier and Poole, 1973, p. 156). He explained that one must spend the rest of one's life proving you're worth something. In indigenous tribes, the general approach was that the land itself gives them life and supports

them in all they do. Instead of feeling like an individual substance, a free-floating, rootless atom, one becomes aware of being imbedded in nature, part of an on-going web of life. Quoting Pelletier again: "The land is sacred. You don't live off it, like a parasite. You live in it, and it in you, or you don't survive...You belong to the land. And that's who you are" (Pelletier and Poole, 1973, pp. 209-210).

Back in camp, after dinner and around the fire we do American Indian chanting with a drum for some time before even considering the day's events. It's now been proved that in human evolution, talking came out of chanting. And we've found that what the chanting does for us is that the people see ever deeper meanings in the words as they are chanted over and over and relate them to the day's events. So that when we pass the "talking staff" around the circle to relate the day's events (LaChapelle, 1988, pp. 290-298), it's already mythological. Already in their hearts it's become part of the on-going chant. When I introduce the "talking staff" I call on the mountains surrounding us in the

four directions to speak through us as we talk. This also enables the people to get out of the narrowly human dimension into the sense of the life of the place as a whole.

who they are in the true sense.

Gibson shows us that perception is a relationship between the organism and its environment taken together.

Often the evening culminates with spontaneous bardic poetry. The rhythms have been growing, the words have been deepening through the evening and eventually someone will give us such a poem. It may be a person who never produced a poem before. The following day that poem remains in our minds as we climb another mountain, or pack out of the valley, and the feeling of the poem goes deeper within, resonating between us and the land. Out of this process comes an ever deepening understanding of the patterns of the place which produce the life there, an ever deepening gratitude to the mountains, trees, rivers and thus a deeper love. A gradual awareness of the affordances of a place allows people to remember

Affordances

The particular concept of affordances is what allows people to begin living deep ecology instead of just thinking about it. James Gibson of Cornell University coined the word in his book, The Ecological Approach to Visual Perception (Gibson, 1979). He explains that he had been "puzzling over vision's perplexities for 50 years." The standard account of perception describes it as an internal process whereby an initially meaningless mass of sensory data is built up into an internal representation of the external world. This, of course, is the usual dichotomy assuming a human perceiver and the purely passive environment. Instead, Gibson shows us that perception is a relationship between the organism and its environment taken together. He first shows how vision was developed through evolutionary time in response to the changing sun's light during the day and throughout the year. See

his book for the full account of his discoveries. But essentially, what he tells us is that one sees the environment not with the substance labelled "eyes" but with the "eyes-in-the-head-on-the-body-resting-on the turning world, going around the sun." It's a perceptual system or relationship.

Affordances come out of the above understanding. The varying surfaces of the environment afford us perception as we move through them and they move by us. He further describes what the environment affords animals (such as humans): terrain, shelter, water, fire, tools, etc. The senses are not passive mechanisms receiving data. They are active, exploratory systems

> attuned to dynamic meanings already present in the environment. "Thus, to a human, a maple tree may afford 'looking at' or 'sitting under,' while to a spar-

row it affords 'perching,' and to a squirrel it affords 'climbing'... The psyche as studied by these direct perceptionist psychologists is a property of the ecosystem as a whole" (Abram, 1985).

On our Breaking Through courses, the clients are helped to discover that the way the rock breaks affords the footholds. This leads to curiosity as to why it breaks in just that way. That happens on good climbing rock. On bad rock, it's just as interesting but at times such a mountain may not afford climbing at all. During the few days we are climbing in this valley, long-gone Pleistocene glaciers become

an intimate part of one's life as the body registers how the ice cut the rock.

On Breaking Through we also learn the affordances provided by positive and negative ions. 1 When a storm front is trying to come in and the positive ion loaded wind is blowing, everyone feels down and uneasy and loathe to move. When the storm finally gets there and the lightning crashes up high, everyone is invigorated and feeling great! Positive ions in general cause depression, lethargy, sometimes suicide. In Switzerland when the foehn wind blows, people are allowed to take off from work and sometimes schools are closed. Positive ions are prevalent not only in "bad" winds but in polluted city air. Negative or "good" ions are preponderant in forests, by waterfalls or on ocean beaches. If variations in the ratio of positive to negative ions can cause anything from suicide to exhilaration, we can see that human consciousness is not confined within the individual human head (anthropocentrism) but instead is part of the affordances of the place and the atmosphere. This is Deep **Ecology!**

I have given some particular ways to begin moving toward experiencing deep ecological principles in education. As a further guide for the direction in which education needs to go, I want to quote from Paul Shepard who teaches Human Ecology:

Beneath the veneer of civilization, to paraphrase the trite phrase of humanism, lies not the barbarian and animal, but the human in us...There is a secret person undamaged in every individual, aware [of the real needs]. All of them are assimilated in perverted forms in modern society: our profound love of animals twisted into pets, zoos, decorations, and entertainment; our search for poetic wholeness subverted by the model of the machine instead of the body; the moment of pubertal idealism shunted into nationalism or ethereal otherworldly religion instead of an ecosophical cosmology. (Shepard, 1982, p. 129)

Notes

1. The topic of ionization is extremely complex, but the following excerpt from Earth Wisdom (LaChapelle, 1978), pages 56-57, provides a brief introduction. Please refer to Earth Wisdom for a more indepth discussion of how the two types of ions impact on humans and are differentially distributed according to places and conditions.

In the late 1890's, it was found that atmospheric electricity depends on the existence of gaseous ions in the air. The word ion is derived from the Greek word meaning "to go," "to move." An ion is an atom or group of atoms that is not electrically neutral, but instead carries a positive or negative electric charge. While I refer here to single atoms, the definitions apply to groups of atoms or molecules as well as to single atoms. An atom is electrically neutral when the number of electrons surrounding the nucleus (or nuclei) is equal to the atomic number. It becomes a positive ion if one or more electrons are missing; it becomes a negative ion if it has one or more extra electrons. In order to ionize an atom or a molecule, energy must be supplied to it in some way. This may come about as a result of kinetic energy; a collision with a rapidly moving molecule, ion, or electron; or by interaction with a quantum of radiation (a photon), as when solar energy acts on it. Ionization is also produced by cosmic rays and radioac-

It is important to realize that the words, negative and positive when referring to ions have to do with the electrical charge of plus or minus, not with the effects on the human being. Negative electrical charges have good effects on humans; while positive, in general, often have bad effects.

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