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## The Psychology of Environmentalism Healing Self and Nature

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#### Introduction

In her recent novel, *Accident/A Day's News*, Christa Wolf. an East German writer (or perhaps it is more correct to say now, a writer who is a resident of the new federal German states) has presented a compelling picture of a modern world in which inner and outer nature have both suffered fundamental corruption. During the single day within which the entire novel is set, the news of the Chernobyl nuclear power plant accident in the Soviet Union, and the cloud of radioactive particles which it produced, have reached central Europe. At the same time, the narrator's brother is undergoing a delicate operation to remove a brain cancer. The reader does not know whether the cancer is the result of an environmental factor or a spontaneous, but natural, alteration of cells. But it is clear that nothing in the world of nature, or inside the brain, can be trusted to keep its familiar shape.

At one point in the book, the narrator remembers a poem:

"There was a cloud my eyes dwelt long upon It was quite white and very high above us Then I looked up, and found that it was gone... And yet that cloud had only bloomed for minutes When I looked up, it vanished on the air. She reflects,

Hopefully only minutes, was all I could think, although this is a song from the time when clouds were 'white' and made of poetry and pure, condensed vapor. But now, I thought while peeling the boiled potatoes, it should be interesting to see which poet would be the first to dare sing the praises of a white cloud. An invisible cloud of a completely different substance had seized the attention of our feelings—completely different feelings. And, I thought again with that dark, malicious glee, it has knocked the white cloud of poetry into the archives. It has, in the space of a day, broken that and almost every other spell..1.

To speak of the psychology of environmentalism is to recognize that environmental issues involve not only the world "out there," but also the world "in here." This was true of the poet who celebrated the beauty of the cloud and of human perception of the cloud in the relatively innocent world, environmentally speaking, before the first atmospheric

nuclear test. It is also true of the novelist who sees in Chernobyl and in cancer an outer and inner corruption radically related to one another.

## **Ecological Consciousness**

A description of the psychology of environmentalism begins appropriately with consideration of the natural state of the human psyche, and of the development of ecological consciousness. The point of origin of this process can be located somewhere within prehistory, and the evidence for it is found partly in archaeology and partly in comparative ethnography. For more than ninety-nine percent of the experience of *Homo sapiens* on the Earth, human culture was in the palaeolithic gatherer-hunter-fisher stage. The pattern of psychological evidence for this stage is remarkably similar for human groups in widely separated parts of the world, whether in Africa, Australia, Siberia, pre-Columbian North America, or pre-agricultural Europe.

In these primal societies, it is evident that ecological consciousness consists of an awareness of the identity of the Self with all of nature. It is achieved by normal psychological development in contact with nature, which can be assisted by cultures affirmatively adapted to the natural environment. It is manifested in reverence for life. The term "primal" is used here to avoid the pejorative connotations of words like "primitive," "animistic," or "precivilized." Obviously this is a universal substratum for all later developments; it existed for such a long time that it is engrained in the genetic and structural heritage of the human species, and it still lies importantly below the civilized veneer of modern societies. Certain broad characteristics can be identified wherever primal psychology appears. Primal people see the world as filled with spiritual power and populated by spirit beings. The universe is a sacred place. All beings are alive and sentient, including the Earth and sky. Animals and plants are to be approached with reverence, killed only when needed, and treated with honor even after they are killed. A human being is primarily a member (in the old sense of "an integral part") of a tribe, not a separate individual, so that community is a "given" in primal experience. Individuals may go out into the world of nature, or the world of dreams, to gain spiritual power ("the vision quest"), but this power is to be used for the benefit of the group. Time is seen as circular and repetitive, and the act of creation as something that can be repeated in rituals. Elders are to be respected and protected, since they embody the wisdom and memory of the community.

Underlying this view of the world is a perception that the human being is one with all nature. Nature is the larger whole of which mankind is only a part. People stand within the natural world, not separate from it; and are dependent upon it, not rulers of it. All living things are one, and the human individual is joined with every living and nonliving being in a vast, powerful, interrelationship. As Intiwa, a Hopi Indian, expressed it, "The whole universe is enhanced with the same breath, rocks, trees, grass, Earth, all animals, and people.".2. In the Apache puberty ceremony, the young woman having her first menses is completely identified with Mother Earth, and in the ceremonial she walks as the goddess and speaks blessings to the people as the most important deity.

This basic principle of ecological consciousness persisted in the agricultural societies and the first civilizations, although not without challenge. In the religious and funereal texts of pharaonic Egypt, for example, there is a constantly reiterated theme of the underlying unity of all the gods and the universe, and the identification of the human organism, body and spirit, with the larger world. This is found in, but is not limited to the famous monotheistic *Hymn to Aton*. Indeed, older hymns of praise to Amun and Ptah within the context of polytheism express it very well. "Amun, who abideth in all things!... Father of the fathers of all gods, who didst raise up the sky, and lay low the ground, who madest that which is... We revere thy might, because thou createdst us.".3" Thà imagà oæ identitù betweeî thà Selæ anä thà Alì ió thà principlà thaô guideó thà souì botè iî presenô lifà anä iî thà continuatioî oæ lifà afteò death whicè afteò alì ió iî á worlä noô unlikà thà presenô

one witè á river animals trees anä environmentaì dangeró anä blessings(r) "É aí Osiris, announceä thà deceaseä iî thà Booë oæ thà Dead á collectioî oæ spelló includinç manù iî whicè thà humaî souì waó successivelù transformeä intï variouó birds reptiles mammals anä gods..4.

Greek philosophers may not have surpassed the Egyptian vision of the oneness of self with the natural universe, but they articulated it more explicitly. They began with mythography such as that of Pherekydes of Syros, the teacher of Pythagoras, who employed the image of the marriage of Zas and Chthonie to symbolize the union of the human mind with nature and the Earth...5. In Pythagorean thought, the human individual was held to be a microcosm of the universe. The body of the universe in their view was composed of elements which were the same as those that formed the human body, and the soul of the universe was the source of all souls. Human souls, they maintained, were not different in kind from those of animals and plants. Indeed, with the vision of a long ecological recycling of souls, one philosopher could say, "In the past I have been a boy and a girl, a bush, a bird, and a silent waterdwelling fish.".6. The ethical implication of this form of environmental consciousness for the Pythagoreans was a refusal to kill any form of life, or to eat any food that was the result of killing.

Plato conceived that the cosmos is "a living creature, one and visible, containing within itself all living creatures, which are by nature akin to itself.".7. This living creature is "endowed with soul and reason," of which human souls and human reason are part and image. The Stoics also viewed the cosmos as an organism which is sentient, rational, pervaded by harmony, and of which human beings are parts reflecting the nature of the whole. Human bodies are of the same nature as the Earth, since they were generated out of the Earth. Humans are alive because the cosmos is alive; individual souls are extensions of the world-soul. As Plato says, "Whence can the human body have received its soul, if the body of the world does not possess a soul?".8. This view gives humanity an integral place within a living universe; the human psyche shares the qualities of the whole organism by physical existence, living, sensing, and being conscious. This strand of Greek philosophy preserved, in an intellectual form, the primal realization of the identity of the Self with the central principle of the natural environment. In the orient, Hinduism also gave the ringing affirmation of the Bhagavad Gita, *Tat tuam asi*, "that art thou," that is, that the Atman or true human soul is the same as the Brahman, the creative principle of the whole universe. Taoism's central tenet is very similar.

The ecological world view develops from, and comports well with, the primal tradition. Some environmentalist individuals and groups today are advocating the use of and/or seeking to use a primal mode of discourse because of their perception that to do so will help to recover lost values for the modern world. Among these values, they tend to believe, are ways of healing for the spirit as well as the body, recovery of community on a deep level, the affirmation of Earth as a living organism, and avoidance of environmental degradation. For examples of this current in contemporary thought, please see the bibliography that accompanies this paper.

## **Environmental Degradation**

The loss of a psychological balance with nature is not only a modern phenomenon, and did not result from the Industrial Revolution, although it certainly was exacerbated by that development. But environmental problems have existed since early times. Recently a popular book appeared in Germany entitled *Smog uber Attika* (*Smog over Attica*), by Karl-Wilhelm Weeber, which details such ancient ecological disasters as *Waldsterben* (forest death) in the shadow of the Acropolis, the environmental destruction attendant upon warfare, and the *Vernichtung* (extermination) of wildlife..9. One can, however, trace the problems back even further.

Paul Shepard did this in an extraordinary book, Nature and Madness, a psychohistorical

tour de force which delineates the decline of the human relationship to nature, considering individual and social developments in parallel..10. He sees the present environmental malaise as resulting from failures in psychological maturation which occurred in corresponding cultural-historical periods on the collective level, and psychological-developmental periods on the individual level. Shepard equates the loss of a mutually supportive ecological relationship to psychological illness. He begins with the hunter-gatherer stage described in his earlier work, *The Tender Carnivore and the Sacred Game*,.11. which represents humankind's healthier psychological beginnings, and passes through agriculture, monotheism, puritanism, and the estrangement of modern urban mechanism on his way to a reasoned look at the prospect of the future. At some point along this path, the human psyche, culture and technology must all have gone astray.

It is interesting to speculate what may have been the environmental original sin that turned ecological consciousness against itself and exiled humankind from the harmonious hunting grounds of primal times. Some have suggested that it was the domestication of plants and animals and the invention of agriculture. But the earliest agricultural villages kept the primal sense of oneness and reverence for nature, extending the respect of the hunters for the prey species to the bull and the corn plant. The primal planting stick, with its pleasant phallic associations, did little harm to the Earth, and the community kept up the old hunting practices and the rituals associated with them.

Environmental degradation can result from a psychological or cultural dysfunction which blocks the achievement of environmental consciousness. Nature then is treated as a means to serve frustrated psychological drives. The first evidence for such a psychological change comes soon after three revolutions in technology and life style: the plow, the city, and writing; all of which occurred in the Near East during the fourth milennium B.C. To the primal mind, the act of plowing represented a violent subjugation of the Earth; the American Indian prophet Smohalla was quick to see this, and protested, "You ask me to plow the ground! Shall I take a knife and tear my mother's bosom?".12. The city with its monumental walls effectively established a split between human habitation within and the wilderness outside. Gilgamesh was proud of the walls of Uruk, which he had built, and his people feared Enkidu, the hairy man of the open spaces and the protector of wild animals..13. The invention of writing enabled humans to interpose one more filter between experience and nature, and it also preserves evidence of a new attitude toward the cosmos. In the Mesopotamian creation epic, Enuma Elish, nature has become a threatening monster of chaos (and, significantly, a female monster), who is overcome by an urban hero-god who kills her and divides her body, making Earth of one half and Sky of the other..14. Oneness has been split in two, and order established at the price of ecological consciousness. Reverence for life also disappears. Now the chief tasks of the king of the city include the invasion of forests to cut down the formerly sacred cedar trees and the slaving of lions simply because "they glory in life.".15.

A psychological split of the type just described allowed or even dictated environmental degradation. It is significant that the first major environmental problems in history appeared in the neighborhood and at the time of the first civilizations of Mesopotamia. Forests were stripped from the mountains bordering the valley of the two rivers, and the resulting erosion increased the salt content of the runoff, so that both deposition and salinization afflicted the lowlands. Although irrigation extended the area under cultivation, intensive agriculture brought dangers with it. Physical anthropological analysis of skeletal remains from cities of this period shows that although the population increased, the average height, health, and life expectancy of human beings all declined as compared with the farming villages and the hunting societies which preceded them.

## **Projection on the Environment**

When the primary development of ecological consciousness is blocked, one or more archetypes can be projected on various aspects of nature. In the warrior society of the new

cities, this occurred with the archetypal feminine. It was noted above that the monster of chaos, that is, of original undifferentiated nature, was perceived as female (Kur or Tiamat). This projection has the result of constellating the negative energy of natural images for the psyche. The result is either antipathy for or obsession with these, or perhaps both at once. An example is the portrayal in Mesopotamian literature of the goddess Ishtar, who stands for the feminine side of nature. When she offers Gilgamesh marriage, he denounces her for having betrayed her former lovers, turning many of them into animals and causing all of them to suffer..16. It is apparent in this myth that nature is a fickle woman who cannot be trusted. One thinks of the T.V. commercial a few years ago in which a vindictive woman appeared, produced a storm by snapping her fingers, and screamed, "It's not nice to fool Mother Nature!" The identification of nature with woman, and the mistreatment of both, has been the subject of much recent study..17.

A projection of the shadow archetype on nature occurred with the ascendancy of Christianity in late antiquity and the denigration of the body for the sake of the soul's salvation. This was a tendency of Greek thought which Christianity adopted and emphasized. In this view, the soul had to be purified of the body, and everything else in nature, which was corrupt and evil. By late antiquity, the god Pan had come to be regarded as the personification of all nature, the "green power in all that grows.".18. He was the supposed bringer of "panic," an irrational fear which could afflict not only the warrior in battle, but also the solitary wanderer in wilderness places..19. The anti-natural tendency in Christianity therefore portrayed the devil in the image of Pan, with horns, goat's foot, and tail. Synesius of Cyrene prayed to be released from "the demon of the Earth, the demon of matter,...who stands athwart the ascending path.".2O. It is not exaggerating the case to say that the popular Medieval Church was obsessed with this projection, and that Pan, in his iconographic guise of Satan, appears more commonly in Medieval art than any other pagan god.

While discussing the subject of iconography, it is interesting to note that the motif of oneness with nature, although repressed, never completely disappeared. Here and there, peering out of the most unexpected corners of medieval cathedrals, can be spied the Green Man, a human face made of leaves, or disgorging leaves from its mouth, or borne as a fruit or flower on a stalk..21. The archetype that had expressed itself in the visual metaphors of the green skin of Osiris and the ivy- and vine-garlanded Dionysos was not dead, but its appearances were banished from the altar and limited to the fringes: to column capitals and choir stalls.

The projection of shadow energy on nature can be especially destructive when the psyche is not repelled, but fascinated by it. This occurred in the occult ideology of Nazism, as recent studies by Robert Pois and Anna Bramwell have shown..22.

Otheò formó oæ projectioî oî naturà seeí salutarù enough(r) Johî Muir thà quintessentiaì Americaî naturà mystic sa Goä iî á Sequoiá tree tooë Sequoiá juicà aó communioî wine anä waó willinç tï worshið Lorä Sequoia(r) Yeô iî thaô excesó oæ devotioî tï Naturà hà seemeä neveò tï abandoî hió owî truà self perhapó becausà aô basà hà kne thaô iô waó iî thà selæ thaô naturà waó trulù found(r) Iî hió Journal hà wrote "Wà arà parô oæ naturà now neitheò olä noò young buô immortaì iî á terrestriaì way neitheò sicë noò well.".23.

Projection on nature as a force both in environmentalism and in environmental degradation is, of course, still abroad in the world. It is easy enough to organize opposition to the clubbing of extremely cute seal pups in the Canadian Arctic, but the movement to restore the wolf to Yellowstone has to overcome the negative side of the wolf symbol for the collective and individual psyche, so that *Canis lupus* unjustly suffers from the fact that *homo homini lupus* ("man is a wolf to man"). The vast, tragic image of Moby Dick has possibly preserved more than one species of whale, but one foresees much less support for the recently launched campaign to save the shark.

### **Environmental and Psychological Malaise**

Hippocrates of Cos wrote a work of remarkable insight into the relationship between environmental factors, diseases, and psychology entitled *Aeron Hydaton Topon (Airs, Waters, Places)*. In it he maintains that if one knows the quality of the water, the exposure and prevailing winds in a locality, one can understand the illnesses that will ordinarily affect the inhabitants, as well as their temperaments and characteristic personality traits. Bad water and stagnant air have predictable results. He stops short of urging sufferers to send their sinuses to Alexandria, although moving to a better climate for one's health was something many of the more affluent of the ancients did. Many Roman writers built villas in the countryside to escape "the smoke, the wealth, the noise of Rome.".24. In more recent times, moving away from the source of pollution has become less of an option for the wealthy; it never was an option for the poor.

It is quite clear that environmental pollution today threatens physical heath in countless ways. To give just one example, the Environmental Protection Agency estimated that each year about 250 billion gallons of untreated waste leaks from sewer systems in the United States, contaminating ground water...25. But psychic health and environmental health are no less correlated, both through physical factors that affect the nervous system and through perception of the degree to which the natural order of the world has been disturbed. On a conscious or unconscious level, the psyche must deal with a series of threats such as radioactive pollution, the diminishment of the ozone layer, increasing acidity of precipitation, global warming, exploding populations, and the extinction of thousands of species, that have made it impossible to take a stable, supportive world for granted. The present environmental crisis is inevitably connected with a psychological crisis both for the individual and on a world scale, and if denial is the defense mechanism of choice for most people, it is becoming less and less effective as the visible signs of destruction increase, and psychotherapists are in any case aware of the damage that repression can do. Environmental degradation increasingly threatens the wholeness of every psyche.

## **Environmental and Psychological Healing**

Psychotherapy could have a role in environmental healing, in that it could help to restore ecological consciousness, or perhaps it would be better to say that it could assist in evolving a new ecological consciousness compatible with the world views that science is developing. H.L. Leff has offered a description of modern "ecological consciousness" which includes the following elements: (1) A sense of self as a part of a larger holistic system; (2) An understanding and awareness of the ecological processes within this system; (3) A high ability to enjoy and appreciate things in themselves (that is, without concern for their usefulness); (4) A life-affirming value system; and (5) A creatively cooperative motivational orientation toward people and other living things..26. It seems reasonable to expect that raising the level of this kind of consciousness would improve the quality of life for the individual and also would result in less harm to the environment. This is true because the corollary of ecological consciousness ió reverence for life, which includes care for the earth and living things..27.

Many environmental educators suggest that the development of some such ecological consciousness should be a goal of the curriculum along with the usual teaching of scientific ecological concepts. But psychologists could also consider whether the evolution of some forms of "eco-therapy" might also be salutary, since a recognition of the deep relationship to nature is a healing factor for the psyche. The environmental psychologist Richard J. Borden has advocated such a program:

If, as [some].28. have suggested, our consumptive materialistic behaviors really are maladaptive, then therapeutic strategies are not out of the

question. To be unaware of the Earth's finitude and its growing populations may be ignorance; to deny these facts, once realized, is pathological. It would not be difficult to envision the practice of psychology in the form of workshops or retreats for "learning to live with less" or better yet, "living better with less.".29. Similarly, much work needs to be done in helping people overcome the feelings of anxiety and guilt that frequently accompany the stepping back from the obsessions of materialistic achievement. These feelings of worth via accumulation, position, and power have been strongly inculcated cultural lessons. They undoubtedly leave their scars and thus inevitably must be healed. In their place it is possible to develop a multitude of ... experiences [to amplify ecological consciousness]. These experiences might involve creative problemsolving...; exercises for shifting from egocentrism to ecocentrism in feelings and thoughts; cross-species empathy training; "finding and feeling" one's sense of connection in the web of life, and so on. One thing is clear, however, the future of psychology must be different from its history. In the final analysis, its future, like the future of humanity, rests on its capacity to find, appreciate, and act upon an ecological and evolutionary ethic..3O.

Since Borden wrote this challenging paragraph, it has become clearer that what may be most needed on a psychological level is not the inculcation of ecological principles, but enabling the individual to deal with inner and outer crises that arise from ever more threatening environmental changes, as millions of people find themselves in the position of residents of the Love Canal, neighbors of Three Mile Island, or Kuwaitis under the triple environmental impact of a pall of toxic smoke from burning oil wells, a gigantic oil spill in the gulf, and exacerbated sandstorms due to the massive disturbance of desert soils and vegetation by the war. Ecological consciousness, as the evidence from primal communities and ancient civilizations indicates, is an imperative of the human psyche. But the restoration of the environment itself is also essential to psychic health. It would be perverse to expect that psychology should limit its role to helping people to adjust to, and live happily in, a world that is overpopulated, with a declining quality of life, and a series of environmental disasters that threaten existence not only for a large proportion of the human race, but for all forms of life. To pursue such a limited goal would put every psychotherapist in the position of the doctors of M.A.S.H., whose job it was to patch up the combatants so they could go back to the front and perhaps be wounded again or killed, without being able to do anything about the war itself or the causes of war. But it would be even worse than that, because the supposed cure would only make the disease worse for everyone. What those of us in the business of education and psychology must do, therefore, is to raise our own ecological consciousness and move creatively, both in our professions and in the larger world, to operate as environmentalists in the best sense of that word which each of us can conceive.

#### **Notes**

- 1. Christa Wolf, *Accident/A Day's News* (*Storfall: Nachrichten eines Tages*), translated by Heike Schwarzbauer and Rick Takvorian. (New York: Noonday Press, 1989), pp. 53, 55. See also Marlene A. Schiwy and Steven M. Rosen, "Spinning the Web of Life: Feminism, Ecology, and Christa Wolf," *Trumpeter* 7:1 (Winter 1990): 16-26.
- 2. Elsie Clews Parson, *Pueblo Indian Religion* (Chicago: University of Chicago Press, 1939), p. 198.
- 3. Adolf Erman, ed., *The Ancient Egyptians: A Sourcebook of their Writings* (New York: Harper and Row, 1966), pp. 286-287.
- 4. Raymond O. Faulkner, ed. and transl., The Ancient Egyptian Book of the Dead

- (London: British Museum Publications, 1985).
- 5. Hermann S. Schibli, *Pherekydes of Syros* (Oxford: Clarendon Press, 1990), pp. 50-77.
- 6. Empedocles, fragment 117.
- 7. Plato Timaeus 3OD.
- 8. Plato Philebus 29A-3OA.
- 9. Karl-Wilhelm Weeber, *Smog uber Attika: Umweltverhalten im Altertum* (Zurich: Artemis Verlag, 1990).
- 10. Paul Shepard, Nature and Madness (San Francisco: Sierra Club Books, 1982).
- 11. Paul Shepard, *The Tender Carnivore and the Sacred Game* (New York: Scribner's, 1973).
- 12. James Mooney, "The Ghost-Dance Religion and the Sioux Outbreak of 1890," *Fourteenth Annual Report of the Bureau of Ethnology* to the Secretary of the Smithsonian Institution, 1892-1893, by J.W. Powell, Director (Washington: Government Printing Office, 1896), p. 721.
- 13. *The Epic of Gilgamesh*, translated and edited by N. K. Sandars (Harmondsworth, UK: Penguin Books, 1960), pp. 59-61.
- 14. James B. Pritchard, ed., *The Ancient Near East*, Vol. I (Princeton: Princeton University Press, 1958), pp. 31-39.
- 15. Gilgamesh, p. 94.
- 16. Gilgamesh, pp. 83-85.
- 17. Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper and Row, 1983).18. *Orphic Hymn to Pan*, transl. by the author, "Environmental Ethics in Classical Polytheism," in *Religion and Environmental Crisis*, edited by Eugene C. Hargrove (Athens, GA: University of Georgia Press, 1986), p. 11.
- 19. David Rains Wallace, "Panic and Dream Time," in *The Untamed Garden and Other Essays* (New York: Macmillan, 1986), pp. 105-112.
- 2O. Synesius of Cyrene, *The Essays and Hymns of Synesius of Cyrene*, transl. by A. Fitzgerald, vol. 1 (Oxford: Clarendon Press, 1930), Hymn IV, pp. 240 f.
- 21. William Anderson, *Green Man: The Archetype of our Oneness with the Earth* (London: Harpercollins, 1990).
- 22. Robert A. Pois, *National Socialism and the Religion of Nature* (London: Croom Helm, 1986); Anna Bramwell, *Ecology in the Twentieth Century: A History* (New Haven: Yale University Press, 1989), pp. 195-208.
- 23. Catherine L. Albanese, *Nature Religion in America* (Chicago: University of Chicago Press, 1990), pp. 99-101.

- 25. U.S. Environmental Protection Agency, *Report to Congress: Waste Disposal Practices and Their Effect on Ground Water* (Washington: U.S. Government Printing Office, 1981), pp. 265-364.
- 26. H.L. Leff, *Experience, Environment, and Human Potentials* (New York: Oxford University Press, 1978), p. 13.
- 27. Albert Schweitzer, "The Ethics of Reverence for Life," in *The Philosophy of Civilization* (New York: Macmillan, 1960), pp. 307-329.
- 28. M.P. Maloney, M.P. Ward, and G.N. Braucht, "A Revised Scale X for the Measurement of Ecological Attitudes and Knowledge," *American Psychologist* 3O (1975): 787-79O.
- 29. D. Elgin, Voluntary Simplicity (New York: Morrow, 1981).
- 3O. Richard J. Borden, "Personality and Ecological Concern," in *Ecological Beliefs and Behaviors: Assessment and Change*, edited by David B. Gray, et al. (Westport, CT: Greenwood Press, 1985), pp. 121-122. Some exercises useful for the kind of work suggested by Borden are found in Joseph Cornell, *Listening to Nature: How to Deepen Your Awareness of Nature* (Nevada City, CA: Dawn Publications, 1987).

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