

# PRIMITIVE MAN'S RELATIONSHIP TO NATURE

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In discussing the causes of our environmental crisis, many authors seem to consider modern man's relationship to his environment as somehow unnatural. This attitude is due, in part, to a belief that primitive man lived in harmony with nature, a harmony that has been lost by modern society. Both Christianity (White, 1967) and Christianity coupled with technology (Roszak, 1969) have been blamed for this loss of harmony with nature. Yi-Fu Tuan (1970) and Richard Wright (1970) have disputed this belief by showing that Christians are not alone in their exploitation of the environment but share this trait with other cultures. Still, the attitude persists that primitive man, especially the American Indian, was somehow attuned to nature. This belief appears in Stewart Udall's book *The Quiet Crisis* (1964) in which he speaks of the land wisdom of the Indians, and in Theodore Roszak's *The Making of a Counter Culture* (1969) in which the kinship of primitive man to nature, as reflected through his belief in spirits and magic, is taken as an indication of a primitive ability to live in harmony with the environment. More recently Fertig (1970) has attempted to show that "Indians were part of a natural order between whose people and other animal and plant life there was a well-nigh perfect symbiosis" and concluded that "the Indian's nearly forgotten land wisdom, his ecological sense, is indispensable to our survival." It is my contention that primitive man was no better in his attitude toward his environment than we are today and that the concept of primitive man living in harmony with nature is a serious distortion of the facts.

For the purposes of this discussion, primitive cultures can be viewed as differing from modern society in three significant ways. The first two of these are in population size and in the level of technological sophistication. The

populations of primitive peoples were small and the waste products of their cultures were for the most part biodegradable and did not occur in such concentrations as to overwhelm the ability of natural systems to deal with them. The situation is far different today. Not only is our population density such that our wastes cannot be accommodated easily by natural processes, but we turn the resources of our environment into new synthetic forms that cannot be degraded by natural processes and that may actually poison them. Furthermore, our technological sophistication allows a much greater level of consumption than was possible for primitive man. This very real *difference in ability* to affect the environment between primitive people and modern society must not be confused with a *difference in attitude* toward the environment.

The other significant difference between modern society and primitive cultures is in the way that primitive people view nature. The religions of primitive peoples, full of spirits and myths, often express a kinship with nature or what Cassirer (1944) calls a sympathetic view of nature. This view is often expressed by American Indians when speaking of nature. Roszak quotes a Wintu (California) Indian as saying:

The white people never cared for land or deer or bear. When we Indians kill meat, we eat it all up. When we dig roots, we make little holes. . . . We shake down acorns and pinenuts. We don't chop down the trees. We only use dead wood. But the white people plow up the ground, pull up the trees, kill everything. The tree says "Don't. I am sore. Don't hurt me." But they chop it down and cut it up. The spirit of the land hates them. . . . The Indians never hurt anything, but the white people destroy all.

Similarly, Udall (1964) refers to many Indian sayings such as "the land is our mother" and "Our fathers received the land from God" to show the reverence that the Indians had for their environment.

While primitive man thus may view his relationship with nature quite differently from modern man (see also Kluckhohn and Murray, 1956), his actions toward nature are another matter. Tuan (1970) has pointed out that a wide gap may exist between a culture's ideals and the expression of those ideals in the real world. This is not to deny that many Indian actions were and are ecologically sound. In order for primitive man to survive he, of necessity, had to develop a certain harmony with nature. To put it bluntly, those tribes that did not develop some "ecological consciousness" soon became extinct. However, I believe that this ecological consciousness was not arrived at through careful analysis of the environment, but rather through a trial and error approach. Harmony with nature, thus arrived at, did not prevent the existence of polluting habits, when these habits did not immediately threaten the survival of the society, nor did this harmony with nature prevent the acceptance of new inventions or ways of life that were ecologically disastrous.

Thus, the Sioux Indian, who would not drive stakes in his mother, the earth, or cut her with a plow, showed no qualms about driving a herd of buffalo over a cliff or about starting a range fire to drive the buffalo. The Indian, like the wolves, often ate only the choicest parts of the buffalo, the tongues, when game was plentiful, or left some of his kill unused (Wheat, 1967). Indeed, primitive man's hunting abilities are believed by Martin and Wright (1967) to have been the cause of widespread extinction of large mammals during the Pleistocene. Early man was nomadic in part because prolonged habitation in any one area depleted game and firewood and accumulated wastes to the extent that the region was no longer habitable. One

wonders, looking at Mesa Verde cliff dwellings, what it was like to live over a garbage dump. Was their custom of throwing all garbage over the edge of the cliff in front of their homes any different from our current civilized attitudes?

Finally, it has been shown that the American Indian was quite willing to take advantage of advances in technology to further exploit his environment. Farb (1968) has documented the effect of the horse on the lives of the Plains Indians long accustomed to hunting and travelling on foot. The horse caused a revolution in hunting ability. Buffalo robes were a sign of wealth to the Plains Indians and with the advent of the horse, the hunter could kill more buffalo than one woman could clean. The result was that good hunters had many wives and even accepted as wives men who did women's work, not for any sexual purpose, but so that more hides could be processed. There is some feeling that even if the white man had not overhunted buffalo with firearms, the buffalo would soon have been exterminated by overhunting on the part of the Indians. Other examples of acceptance of new technologies without regard to their long-range effect upon the environment are to be seen in the Navaho acceptance of sheep, and the subsequent over-grazing in the Southwest, and in the litter of bottles and junked cars to be found on Indian reservations today.

Perhaps there are some primitive peoples living in limited areas such as islands who have a clear view of the limitations of their resources and of the need to conserve them. Lyle's story (1967) of the Tikopian Islanders, who refused steel implements because they could not make them, gives some indication of this. The American Indian, however, shared with the early white settlers of our continent a feeling that there were limitless horizons toward which he could expand. Despite his expression of a kinship with nature and his possession of a few ecologically sound practices, his actions show him to be no better than the early white settlers in his understanding of his

basic dependence upon his environment.

A return to the "ecological intuitions and memories of the Red Man," as called for by some authors (Fertig, 1970), is not a solution to our current ecological problems. The Indian's actions toward nature were, and are, identical to those of modern man. What concern for the environment there was existed for the express purpose of guaranteeing human survival. A true reverence for nature, where nonhuman organisms are given a right to survival equal to that of man, has never been part of man's emotional makeup. Man shares with all other animals a basic lack of concern about his effect upon his surroundings. Grizzly bears tear up hillsides in search of ground squirrels and marmots and destroy trees and shrubbery in fits of anger. Herd animals cause erosion on the plains by wearing paths in the topsoil. Many animals, such as bears and wolves, are known to kill more than is necessary for their survival when game is plentiful. We tend to view these actions of animals as part of nature's plan and so they are, but these actions are on a limited scale destructive of the environment. Furthermore, they are no different in kind from the actions of primitive or modern man. Man's attitude toward the environment has not changed in the millennia since his evolution from lower animals. Only his population size and the sophistication of his technology are different.

I personally doubt that large numbers of people can ever develop a new emotion of concern for their environment in which animal life is considered equally as valuable as human life. However, there are signs that this may not be necessary. Unlike many undeveloped countries the United States is not primarily concerned with the basic survival issues of food and shelter. Our great wealth allows us to concern ourselves with the "quality" of our lives. Furthermore, as we become increasingly withdrawn from the land, our interest in its preservation increases. Meier (1966) has pointed out that the cities, repeatedly castigated

for their pollution, are the sources of most of our concern about resources. The rancher in Wyoming, living at a population density similar to that of primitive man, views coyotes and eagles as direct threats to his livestock, and prairie dogs and rabbits as threats to his crops. This frontier attitude toward nature is now seen in the angry reaction of many Alaskans to conservationists' efforts to prevent the development of the North Slope oil fields. One wonders, too, if those who abandon the cities for rural communes in order to avoid pollution and to return to a life style in harmony with nature will develop this frontier attitude toward the environment when their crops and livestock are threatened. It is the city dweller, divorced from a direct dependence upon the land, who has taken the lead in conserving our wildlife and natural areas. Urban citizens can afford to view the eagle and coyote as beautiful creatures, not economic liabilities, and to view land they do not own or have an economic interest in as worthy of preservation in a natural state. Further, it is the urban resident who is most affected by overcrowding and pollution.

To be sure, this attitude of concern stems more from self-interest in recreational use of the environment and in the quality of the air and water that we use than from any true respect for the right of nonhuman organisms. As such, we are likely to save "scenic wonders" and ignore swamps, or to favor oil production and development of boat marinas over protection of natural areas. Still, much can be done through informing the public as to what is truly in its interest. Many swamps have been saved, not out of a public interest in swamps, but because they were necessary wintering places for migratory game birds or spawning grounds for commercial shellfish.

Our population is becoming increasingly urban, and it will be the urban majority that will determine the nation's conservation policies and have a major voice in pollution and population control. As our population becomes increasingly divorced from the land, it

is the duty of every scientist, working through every educational device available, to keep the urban American aware of the natural condition of his country and of his interest in its preservation.

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## THE ENVIRONMENTAL CRISIS IN THE ARCTIC

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As the events of this day\* fall into place, it is well to remember what has transpired. We have witnessed the emergence of a new entity, a national federation with a past heritage and a future role. Three concepts are represented:

- the basic human desire to understand the natural world,
- the human need for a high quality environment,
- acknowledgement that this need has not been met by our social and economic development to date.

This federation implies concern, insight and determination to change concept into reality. The federation is acquiring the necessary funds, identity, constitution and executive direction. It has the most opportune moment in the history of Canada for its emergence. Ten years ago would have been premature and unconvincing, ten years from now will be too late. At this time we have numerous crises, public awareness, and a popular demand for action. The tools for democratic change are at hand, a brand new federal department of the environment and provincial counterparts. The federation's key posi-

tion between public and government is appropriate. Support from many like-minded organizations is assured and the stated principles and objectives of the federation cannot be attacked. The role is custom-tailored and waiting.

If all were *well* in the environment this federation probably would *not* be necessary and would not appear. We would still have the idyllic situation, long since departed, when there was plenty of natural environment for everyone. In those times, the very few natural scientists pursued strange pastimes and sought the close company of a few others of like mind nearby. These corresponded with distant colleagues, also few in number. To the venerable gentlemen who founded the Ottawa Field Naturalists in 1879 and the tiny Great Lakes Ornithological Club in 1905, the present hierarchy of provincial federations, national federations, international unions and world conferences on the environment would be mind-boggling. Now, less than 100 years later, the weight of current publications on natural history and the environment would soon surpass their lifelong library collections and would split their sagging shelves.

But all is *not* well in the environment. Both the quantity and the

\*This paper was read at the inaugural meeting of the Canadian Nature Federation, September 18, 1971.