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TOWARD A PSYCHOLOGY OF WILDERNESS EXPERIENCE

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The writings of Henry Thoreau, John Muir, and Aldo Leopold, the poetry of Gary Snyder, and even automobile bumper stickers proclaim the American need for wilderness. Considering the frequent expression of this need, it is puzzling that justification of outdoor recreation has so often been stereotyped. Wilderness advocate and enemy alike repeat the escapism from urban reality theme with some occasional mention of esthetic, religious, and family values implicit in outdoor activity. Enthusiasts stress the meta-economic value of these activities but this, too, falls short of specifying what human psychological needs are met by the experience.

This paper will elucidate the psychological aspects of one type of outdoor recreation, the wilderness experience. A case will be made for the health resource value of the non-degraded environment and it will be suggested that outdoor recreation such as backpacking, canoeing, nature study, and mountaineering in a wilderness setting offers to the participant a unique opportunity for psychological growth. The creative uses of wild lands by naturalists and writers are viewed as a prototypal environmental use under minimal influence of media images, social influences, and economic considerations. However, increasing numbers of outdoor recreationists are crowding and destroying wild areas and the need for administrative restraints has become obvious, but who should be restrained or encouraged toward what psychological ends has not been examined or defined. Hopefully resource managers and others in decision-making positions will be able to make inferences from the questions and data that will be presented here.

The definition of wilderness used here is that of Congress who termed it "an area where the earth and its community of life are untrammled by man, where man himself is a visitor who does not remain."¹ Recognizing that wilderness may have vastly different meanings in other cultures, the focus in this paper will be on avocational use by Americans.

Both psychology, the scientific study of the mind, and psychiatry, the clinical study and treatment of mental disorders, have made significant contributions to the knowledge of environmental influ-

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1. The Wilderness Act, 16 U.S.C. § 1131(c) (1964).

ences upon human behavior. In an effort to provide conceptual organization to the rapidly growing field of environmental psychology, Moose and Insel² have outlined the major methods by which human environments have been assessed and characterized, listed the types of variables studied, and offered potential environmental typologies. The field has shown particular interest in the affects of architectural and physical design variables upon human activity,³ individual requirement for personal space,⁴ the social influences of cities⁵ and institutions⁶ upon behavior, community settings as laboratories for behavioral studies,⁷ and the effects of environmental stress upon human functions.⁸

Psychiatrists, often working with professionals in epidemiology, sociology, and public health, have on the other hand largely focused upon the association of noxious environments and disease. The high rates of psychoses observed in deteriorated urban areas⁹ and the impact of pollution on mental health¹⁰ are typical of studies which have demonstrated high prevalence rates of disease in degraded environments. However striking these associations may be, the specific causal relationships are still unclear. To what extent do degraded environments cause mental illness and to what extent does the presence of mental impairment predispose the victim toward movement into a degraded setting through a process of social selection? To date the research has largely focused on comparative rates of psychoses among the degraded inner-city and the less noxious peripheral areas of the same city. Laborious case finding and inconsistent community definitions of "disorder" have made rural and urban comparisons difficult. However, studies¹¹ have substantiated the hypothesis that among rural communities those undergoing more rapid cultural change with accompanying social disorganization have higher rates of

2. Issues in Social Ecology: Human Milieus, (Moos & Insel, eds., 1973).

3. K. Craik, *Environmental Psychology*, 4 *New Directions in Psychology* 1-121 (1970); *Environmental Psychology: Man and His Physical Setting* (Proshansky, Ittelson, Rivlin eds., 1970).

4. R. Sommer, *Personal Space* (1969).

5. S. Milgram, *The Experience of Living in Cities*, 167 *Science* 1461-1468 (1970).

6. R. Moos, *The Assessment of the Social Climates of Correctional Institutions*, 5 *J. Research in Crime and Delinquency* 174-188 (1968).

7. R. Barker, *Ecological Psychology* (1968).

8. D. Glass and J. Singer, *Urban Stress: Experiments on Noise and Social Stressors* (1972); H. Selye, *The Stress of Life* (1956).

9. R. Faris and H. Dunham, *Mental Disorders in Urban Areas* (1939).

10. National Clearinghouse for Mental Health Information, *Pollution: Its Impact on Mental Health, A Literature Survey and Review of Research*, National Institute of Mental Health, U.S. Dep't of Health, Education and Welfare Pub. No. (HSM) 72-9135 (1972).

11. D. Leighton, et. al., 3 *The Character of Danger: The Stirling County Study of Psychiatric Disorder and Sociocultural Environment*.

psychiatric impairment and personal discomfort. Although it is tempting to infer that environmental degradation also accompanies rapid cultural change in rural areas the effect of the environmental degradation variable upon health in these communities has not been isolated and studied. In general one could argue that environmental destruction, urbanization, and rapid cultural and technological change are associated with increased prevalence of psychiatric disorders. It can also be stated that idyllic communities living in ecological harmony free of mental disability probably do not exist. There is one report suggesting that one relatively non-degraded and underpopulated environment may attract rather than produce a unique type of mentally impaired individual. Cawte^{1 2} described a "flight to the wilderness" syndrome among psychotic patients he studied in the Australian Outback. Predisposing personality traits and conflicts combined with the appeal of wilderness symbols attracted this group of people to the frontier where the tolerance for deviant behavior provided an ecological niche which allowed them a marginal adjustment not possible in the urban settings they had left behind. Unfortunately there are no data to make quantitative comparisons of psychoses between these frontier and urban settings.

The inverse question—whether there is positive mental health value in non-degraded environments—has received remarkably little attention. If it is true that the stress of the noxious environment causes psychiatric impairment, then perhaps removal from the pathological setting and exposure to the less degraded environment would be therapeutic. Camping and other outdoor activities have been used as treatment modalities.^{1 3} Significant patient benefits may occur but the approach also has risks.^{1 4}

Aside from the disease orientation one can ask if people without psychiatric disability use the non-degraded environment to maintain and develop their emotional health. If so, in what ways is it done and what psychological processes are involved?

A recurring myth in Western culture from biblical times to the present is that poets, philosophers, and prophets find vision and inspiration in the wilderness. Fortunately for our purposes some have written of their experiences in detailed psychological terms. The

12. J. Cawte, *Flight into the Wilderness as a Psychiatric Syndrome*, 30 *Psychiatry* 149-161 (1967).

13. M. Weisman, et. al., *Camping An Approach to Releasing Human Potential in Chronic Mental Patients*, 123 *Am. J. Psychiatry* 166-172 (1966). Nearly half of a patient group who had made no progress in a state hospital were mobilized and discharged following camping sessions. The article contains a lengthy bibliography on the subject.

14. D. Muller, *Post-camping Depression*, 128 *Am. J. Psychiatry* 109-111 (1971).

painter, George Catlin, who Nash¹⁵ feels should be credited for the original national park idea, described his "reverie" when he first envisioned this possibility. The episode occurred during his visit in 1832 to the Indian tribes of the Upper Missouri River. He sat in the shade of a tree and concentrated intensely on a small map of North America, excluding all other thoughts. An "illusion" resulted in which he imagined himself lifted on invisible wings until he floated over the oceans and continents of the world. Eventually, his perspective focused on the brutal destruction of the great North American buffalo herd. The "nation's park" preserve to stop the wastage so globally envisioned during the "reverie" was offered as a solution. Catlin, with apparent strong feeling, concluded that he would prefer no other monument to his memory than to have been the founder of such an institution. The episode can be described as a self-induced altered state of consciousness characterized by depersonalization, hallucinations, altered time sense, an intense feeling state, oceanic yet simultaneously detailed perception of environmental wholeness, intuitive intellectual insight, and a resultant prophetic proposal.

John Muir describes a tree-top ascent during a wind storm.¹⁶ While spending several hours in the tree he gives examples of enhanced sensitivity to and exhilarated enjoyment of proprioceptive, olfactory, visual, and auditory stimuli. Although Muir's tendency to anthropomorphize is distracting, one can determine that he experienced an increased global yet detailed view of organic wholeness of the storm and the trees. Altered perceptions and intellectual insights occurred; an intense feeling state can be inferred from his concluding statement "never before did these noble woods appear so fresh, so joyous, so immortal."

The writings of Loren Eiseley are rich with examples of altered states of consciousness occurring in wilderness settings. Eiseley¹⁷ describes "an unusual physical encounter" in an aspen glen which left him feeling as if he carried a restorative scar from the experience. During the evening while descending alone from mountain heights through the grove he found ancient evidence of man and experienced a feeling of "the future overwhelming the present." Heightened feelings including incompleteness, restlessness, denial of choice, frustrated expectations, and a potential for dissolution into light are described. The encounter contains elements of heightened perception, altered time sense, aspects of depersonalization, and intellectual insight.

15. G. Catlin, *An Artist Proposes a National Park*, in *The American Environment: Readings in the History of Conservation* 5-9 (R. Nash ed. 1968).

16. J. Muir, *The Mountains of California 187-197* (Doubleday-Anchor Paperback, 1961).

17. L. Eiseley, *The Invisible Pyramid* 119-123 (1970).

In the writings of a society which has traditionally so devalued mystical experiences, it is somewhat surprising how many such examples can be found. Some are identifiable even from curtailed descriptions such as the "moment" Colin Fletcher¹⁸ found so powerful that it represented to him everything that wild lands have to offer. Aldo Leopold probably had such a moment in the Sierra Madre Mountains of Mexico when he first envisioned the land and its inhabitants as one organism. Other writers including Henry Thoreau probably had these states of consciousness but have not included details about their cognitive states in their writings.

It is clear from the above accounts that these highly valued experiences enhanced the writers' perceptions of the universe and became basic to the assumptions they made about the nature of reality. Explanations of these powerful psychological phenomena are difficult at best. Knowledge based on disease models is of little value; rather a health orientation is required. The humanistic psychologists offer the most developed ideas for conceptualizing these occurrences. Abraham Maslow¹⁹ has studied what he has termed "peak experience" and "self-actualization" among exceptionally healthy, mature people who have extensively fulfilled their human potential. Self-actualization is a state of "full-humanness" that is both a process and a state of being. Maslow found that people who have achieved high levels of self-actualization had frequent peak experiences during which lasting cognitive changes were made, often in a matter of seconds or minutes. The characteristics of cognition, the process of perceiving and knowing, in the peak experiences have been described by Maslow. The wholeness of the experience is striking; the object(s) of the perception is exclusively attended to, completely absorbing the participant who undergoes an egoless, self-forgetful state associated with disorientation to time and space, often feeling that he has been fused into the object becoming part of a larger, more whole, superordinate unit which is seen detached from its human usefulness, expediency, and purpose. Perceptions are enhanced, becoming detailed and oceanic yet simultaneously abstract and concrete in form. Dichotomies, polarities, conflicts are fused, transcended, or resolved leading to new and creative insights, awareness, and alignments. During the experience the person is closest to his identity or true self and feels the event to be self-validating and of intrinsic value.

Catlin, Thoreau, Muir, Eiseley and Leopold were highly self-actu-

18. C. Fletcher, *The Wilderness is Worth Conserving for Moments Like These*, 1 Backpacker 47 (1973). Fletcher describes a moment when time stopped and he felt close to all environmental objects; he understood the meaning of his long trek along the length of California.

19. A. Maslow, *Toward A Psychology of Being* 71-102 (2d ed. 1968).

alized people who used wilderness experiences to further their growth; their writings suggest that peak experiences aided their understanding of the environment. Conceptual frameworks other than that of Maslow can be used to examine their work. Bucke,²⁰ a nineteenth century neurologist, postulated a spectrum of self-consciousness leading on one end to the highest state, "cosmic consciousness" which he thought to be a recent and still evolving function of man's central nervous system. His supportive examples were collected from the works of religious prophets and writers including Thoreau, Emerson, and Whitman. In 1971 Fischer²¹ presented a cartography of several altered states of consciousness and synthesized recent pharmacological and physiological advances in the understanding of the biological bases of these states. Within this framework the reverie of Catlin is a meditative state mediated by the parasympathetic component of the autonomic nervous system and the treetop adventure of Muir would be an ecstatic state resulting from stimulation of the sympathetic division of this system. Carl Jung, the Swiss psychoanalyst, conceptualized self-development or "process of individuation" in much the same way as Maslow and used the term "archetype" to describe man's inherited unconscious complex of feelings, ideas, and images. Jung personally received tremendous inspiration from nature and mountains and perceived in the latter an expression of man's potential. Wilderness experiences may involve the expression and reaffirmation of specific archetypes.

The development of these suggestions is clearly beyond the scope and intent of this paper. The point is that the behavioral sciences are rapidly developing methods and concepts for the scientific investigation of a variety of human behaviors formerly thought to be in the realm of mysticism and the occult. It is only reasonable to expect that the mysticism of nature as seen in the reveries and unusual psychic encounters of wilderness enthusiasts can be investigated as well.

At this point, I would like to express my personal bias and suggest that it can be formulated into testable hypotheses. The expectation is that wilderness experiences are more likely to foster self-actualization and the occurrence of peak experiences than outdoor activity in more degraded environments. This in no way asserts that these states of being are possible only in more natural non-degraded environments, as they are well-known to occur in many settings, including athletic competition, during courtship and love, in the performance

20. R. Bucke, *Cosmic Consciousness* (1969).

21. R. Fischer, *A Cartography of the Ecstatic and Meditative States* 174 *Science* 897-904 (1971).

and enjoyment of art, and in the scientific laboratory. Maslow has emphasized that self-actualized people make better choices for themselves and feels that they would probably make better choices for those with demonstrated poor decision-making. Are those who choose wilderness activities more self-actualized than those who choose other outdoor recreation? Are they more likely to undergo a peak experience in the wilderness than in a camper-vehicle or on a trail bike or while water skiing? What psychological types of people are attracted by what types of environmental use? If wilderness experience does result in self-actualization, what are the relevant variables? Will such an experience be more likely to occur in a crowd or alone? To what extent does it depend on previous wilderness activity? What is the carrying capacity of wilderness beyond which the social impact of fellow humans reduces the probable occurrence of the desired state? All these questions can be formulated as hypotheses and answered. Measures of individual differences and changes of self-esteem and self-actualization have been developed. The investigation to answer these questions would be difficult but no more so than current studies which have evaluated the impact of encounter groups and psychotherapy on the individual.

There is no scientific evidence to support these hypotheses, but more importantly there is none to disconfirm them. Until the answers do become clear it would seem that we should take seriously the admonitions of our poets and naturalists who warn us that loss of the wilderness is followed by loss of human potential.