## Letters

## Philosophical Barriers to Ecological Ideals

Leo Marx's article "American institutions and ecological ideals" (27 Nov., p. 945) asks why scientists have not responded more enthusiastically to the critical need for environmental control. This scientist would like to attempt an answer from an anthropological point of view. At the heart of my caution is a disagreement with many of the ecology enthusiasts like Marx about the nature of the problem and its solution. Marx thinks that the problem stems most particularly from a peculiar American propensity to consume material goods at an increasing rate, and he suggests that this immoral urge need no longer be permitted, but that we can create a society in which the drive to optimize material power will be eliminated and all are given sufficient means to survive.

Central to my counterargument is the generalization, demonstrated by over 1 million years of human history, and formalized by Leslie White in his writings on evolution (1), that there is nothing about attempts to maximize power and material means (which are power) which is peculiarly American. It is a human trait. If all human beings display a bent for increasing the per capita utilization of energy, what is there about America that is different? There is little mystery in the answer, which has been elementary to sociology for several generations. America is an "open" society, in which a meaningful life, one which makes a person feel as if he is somebody, is attained through the control of material means.

Although we have been fond of thinking of such a social system as unique, there are other examples of it in this world—such as that of the Bushong of the lower Congo. Mary Douglas' comparison of the Bushong and their neighbors (2), the Lele, is instructive in assessing the problem before us. Douglas says that these two ethnic groups have a close common origin, are contiguous, and occupy habitats nearly equal in fertility. She asks why, despite their similarities, the two groups differ so much in material possessions, the Lele being poor and

the Bushong affluent. Her answer is that Lele expansiveness is muted by a clique of old men who control most of the power and eliminate for young men the need or incentive to seek power by entrepreneurship. All they can do is wait until the rewards of age fall into the laps of those who survive. The Bushong are different. They are the African equivalent of Americans because they attain the rewards of social position and power through economic enterprise.

The Bushong are not an odd exception to the rule among so-called primitive people. One might even argue that the Bushong and Lele present us with two basic human social forms, the open and closed society. If this is true, then the alternative to what we have in this country may be the closed elitist system in which expansiveness is muted in the interest of saving the habitat, at a cost of some democratic American ideals. One wonders how Americans will feel about that once the alternative is made apparent.

Visualizing the problem this way, I have little patience with analyses like Marx's which seem so often to make ecological control a vehicle for condemning socio-politico-economic enemies ("value free" scientists, universities, and military and industrial complex) and praising friends (pastoral writers). The alternative to our environmental crisis is not going to be a utopian, pastoral America bereft of immoral, self-seeking aggrandizers, but a kind of social system with many unpalatable features whose existence, at least initially, will be tolerated in the name of species survival. In fact, we must consider the possibility that this price will be considered too high by many who will accept elimination of the species as an alternative. That won't be a novel course. But I think it unlikely.

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## References

L. A. White, The Evolution of Culture (McGraw-Hill, New York, 1959), pp. 33-57.
M. Douglas, in Markets in Africa, P. Bohannan and G. Dalton, Eds. (Doubleday, New York, 1965), pp. 183-213.

Marx has clearly analyzed the analogy between recent ecological movements and earlier ideals of pastoral and romantic literature; but his work needs to be brought more clearly into focus as regards two points, the first technological and the second philosophical.

Marx wonders why most scientists remain somewhat unresponsive to the alarmist rhetoric predicting ecological doom, even though a substantial part of the outcry originates from among their own ranks. It does not seem to occur to him that many scientists consider the alarms to be exaggerated; and that although the nation is faced with unpleasant choices between environmental pollution and some costly remedies, there are great resources of technology to remedy these situations, which are only just beginning to be employed. This is certainly the case in the writer's field of water pollution. Even in our fast-growing metropolitan areas, the threats of water pollution for the near future are to the survival of natural habitat and water recreation areas and not to the continued existence of human populations. In the Western countries with which Marx is principally concerned, the condition in which population growth will exhaust the space and resources available for survival is still some time off.

On the philosophical level, Marx adopts an idea, previously expounded in more detail by Lynn White, Jr. (10 March 1967, p. 1203), that Western man's ecological depredations stem in large part from early Judeo-Christian principles, particularly the biblical injunction that man should utilize nature for his own needs. These anthropocentric principles are seen as the basis for our expansionist economy. . . .

If we may put the religious issue aside as irrelevant, a more serious question is whether, psychologically, it is possible for men to have any motivation other than anthropocentric; and if so, what it consists of. For example, Marx, who considers that man's feelings of superiority over the rest of nature are unfortunate, returns continually for his sanctions to the alleged danger to man's continued existence. His final paragraph, for example, is only slightly refined Malthusianism. Even his injunctions that man should live in harmony with nature may be inferred from the interests of man himself. The closest approach to an ecologically pure position, which would view man as no more important than

any other species, is that of certain ecologists to whom destruction of any natural habitat is wrong, no matter how useful the replacement environment may be to man. To this viewpoint we owe our national parks and wild rivers. But even these programs correspond to human objectives, in that they give intellectual satisfaction to a human elite, and furnish a base for further scientific studies.

In order to clean up the polluted parts of our environment, while seeking to limit the population growth and crass materialism which are the basic cause of it, we should try to unite scientific inquiry, technology, and political and social reform. The opposing forces are ignorance, prejudice, misinformation, selfishness, and inertia. . . .

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Some of Harold Schneider's objections to my argument stem from misreading on his part or lack of clarity on mine. In any case, I surely do not attribute this nation's unmatched rate of consumption to any peculiar American "propensity to consume," whatever that might be. I attribute it, as Schneider evidently does, to institutions (and resources) peculiarly well-suited to that purpose. Whether the special character of our consumer economy can be adequately described by the concept of an "open" society is another large question. If Schneider's definition of "open" includes the whole system of production for private profit, the superb wantcreating apparatus called advertising, the unjust distribution of wealth, and the gross neglect of the "public sector" of human needs, including the need for a life-enhancing environment, I suppose he is correct. But then the question is: Can we any longer afford a society quite that "open" to the denial of our collective interests?

Schneider also seems to think that I consider the "urge" to consume, in the abstract, somehow "immoral." But of course that would be silly. What is immoral is not the urge but the failure to control the urge in the interests of justice and plain decency. What is immoral, in short, is capricious and excessive consumption when it means depriving others of their essential needs. Humanity's capacity for consumption is, for all practical purposes, limitless. But resources and productive power are strictly limited. The moral issue arises

whenever we try, as we surely must, to minimize the suffering caused by that discrepancy. Therefore I do not feel the force of Schneider's attack upon me for making the ecological issue a basis, as he says, for condemning "sociopolitico-economic enemies" and praising "friends." Why not? Ecological problems are in fact "socio-politicoeconomic" problems, and since some people relate to those problems in a self-serving, negligent, or otherwise irresponsible way, and others try to meet them with critical intelligence and imagination, why not make judgments? Making judgments about other people's behavior is, I think, what Schneider would call a "human trait." I plead guilty.

And then, finally, there is the insinuation that I am one of those softheaded types who envisage (as an alternative to what we have) "a utopian, pastoral America bereft of immoral, self-seeking aggrandizers." What could be more damaging to an American male, especially before an audience of toughminded scientists, than the charge of being a utopian dreamer? My first impulse, I confess, was to present my credentials as a practical, feet-on-theground, realistic fellow. But then on second thought I do believe that it is possible to control the worst "aggrandizers." And I also believe that our magnificent and largely unused and uninhabited countryside could be transformed in accordance with certain "pastoral" (or ecological) ideals. This is not to imply that we suddenly would cease to be what we are—an advanced, urban, industrial society. But it would mean a sharp turn away from our reckless and mindless commitment to economic growth for its own sake, and I suppose that in our present situation that sounds-well, why not admit it?utopian. Again: guilty as charged.

Turning now to William Whipple's thoughtful comments, I know that he is correct when he says that many scientists are skeptical about the alarmist predictions of ecological disaster. Many of them think, as he apparently does, that the problem is in essence technological. But I am dubious. It is one thing to say that technological remedies are conceivable, but it is quite another to believe we therefore will apply them in time. In America we have had the technological power to abolish poverty for years, but we have not yet developed the will to do it. The issue, as I see it, is deciding what we want, and whether we want it badly enough to

relinquish the satisfaction of other, lesser wants. After that comes the political problem of acquiring and applying sufficient power to do the job. But in any event, my point is that we laymen want to hear men like Whipple talk back to their alarmist colleagues. We want them to argue, and we want to hear the argument. Scientists, in my view, have a responsibility to enlighten the public about the technological and scientific options, and how they relate to moral or political choices. But I also share Whipple's skepticism about the possibility (or even, for that matter, the desirability) of adopting a "pure" ecological perspective—one from which men would see themselves as no more important than any other species. Between that saintly viewpoint, however, and the arrogant Prometheanism of our expansionary system, there is plenty of scope for a relatively modest expression of mankind's relatively enlightened selfinterest.

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## Radiation and Leukemia Rates

In a report for the Cooperative Thyrotoxicosis Study we reported that the rate of occurrence of leukemia in patients with hyperthyroidism treated with iodine-131 was found to be essentially the same as that of a control group of hyperthyroid patients treated surgically (1). The radiation dose to the bone marrow was calculated to be 7 to 15 rads. At this dose and with the relatively low dose rates of iodine-131 (2), no excess of leukemia was found. We pointed out that the hyperthyroid group (those treated with iodine-131 and those treated surgically) when pooled showed a 50 percent increase in leukemia when compared to the ageand sex-corrected U.S. population at large. This study was subsequently cited by Holcomb (3) in support of a statement that "there are no studies that show increases in cancer at low (below 50 or 100 rad) doses although there are a few that should have detected it if it had occurred."

Our study was criticized by E. B. Lewis (4) as follows:

The only study cited by Holcomb in support of the aforementioned statement actually showed that in a population of hyperthyroid patients treated with radioiodine, surgery, or both, the age-adjusted