

Values in Environmental Ethics: A Critique

Satrughna Behera

Accepting the consequences of scientific revolution and the conditions of a golden age of science and technology, the revolution of environment or, to say, the ecological revolution is of crucial importance to the future of modern civilization. For whether and in what way we can work out a solution to the crisis in environmental relations will determine our ability to progress as a scientific civilization. Following this objective philosophy takes environmental ethics in view of man-environmental relationship as its central concern. It is, I think, only to recommend a new framework, within which philosophers could reconsider their traditional problems and solutions. If the theme of environmental ethics as a topic of applied philosophy implies man's moral obligation to the environment and if it is based on ecological relations, and that is really a revolutionary one above the traditional constructions in ethics. No doubt, certain questions about the relations between man and environment that have bothred philosophers will become even more important, while others will be transformed or simply be laid aside. Similarly, certain ethical principles will undergo the inevitable alterations that stem from any revolutionary encounter. It, of course, would be impossible to describe synoptically all such changes here. In this paper, however, my attempt would be to present critically certain broad considerations of such changes in an apparent perspective of environmental ethics. Here, the question of environmental ethics, I will argue, is the question of the environmental responsibility and ground of human values that become the centre of the philosopher's concern, a kind of locus around which all other considerations will have to revolve. This is so, I think, because the question of value occupies the central place in the heart of the man-environment relationship. We see that man's relationship to the environment is problematic precisely because the consequences of his control over the environmental conflicts with the dominant values which have accrued to his civilization. So search for new values which will define a new relationship with the environ-

ment is an imperative need.

ENVIRONMENT, HUMAN CONCERN AND CONCEPTUAL ACCESSION

The environment can be defined as one's surroundings. The global environment consists of the atmosphere, the hydrosphere and the lithosphere in which the life sustaining resources of the earth are contained. The atmosphere is a mixture of gasses extending outward from the surface of the earth. The hydrosphere consists of the lakes, streams and the oceans as well as the groundwater resources. The lithosphere is the soil mantle that warps the core of the earth. The atmosphere and the lithosphere adjacent to the surface of the earth together with the hydrosphere is most important and is called biosphere. It is estimated that the biosphere contains at least 330,000 species of green plants, 930,000 species of animals and 80,000 species of bacteria and fungi known to science (this is known as bio-diversity). It is within the biosphere that all the life forms of earth, including humans live and the cycles of life-sustaining, materials in gaseous, liquid and solid forms provide sustenance to all living organisms.

Life-sustaining resources air, food and water are withdrawn from the biosphere. It is also the biosphere into which waste products in gaseous, liquid and solid forms are discharged. From the beginning of time the biosphere has received and assimilated the wastes generated by plants and animal life. For example, nature is capable of dispersing smoke from forest fires, diluting animal waste washed into streams and rivers, and converting debris of past generations of plants and animal life into soil rich enough to support future populations. The man has exploited and modified the environment to his advantages in many ways to satisfy his natural and acquired needs. Now unfortunately, on account of the various activities of man, the composition and complex nature of environment gets changes that have been in some respects cause of threat to the natural equilibrium. Such activities include industrialization,

urbanization, construction and transportation etc. These activities, although desirable to human development, welfare and enhanced standard of living lead to generation and release of objectionable materials into the environment thus turning it foul and makes our life miserable.

Given this short scientific description of the environment and the problem to it, it is also significant to notice that the environment has taken as an event of conceptual investigation even before scientific revolution. This conceptual investigation of the environment essentially presents two pictures of man and nature, i.e., either nature is conceived as an order that includes man, or it is conceived as an alien order from which man is excluded. There are, of course, classical and recent variations on these two pictures. The ancients usually looked on man as part of nature. Aristotle conceived of nature as an organism and man as its executive part. For Confucious moral law and the laws by which nature works are part of the same order. The Taoist, Lao-Tzu, and their followers thought of nature as a companion to man, as did Epictetus the Stoic, who held that the wise man should put himself in accord with nature. In more recent times, Galileo viewed nature as a mechanical system devoid of any properties except the quantities of weight, number, and motion. Rene Descartes tried to remedy this imbalance by giving human consciousness a prominence as great as the physical world. He did this by serving all the connections between mind and nature. Nature is a lifeless system from which man excludes himself. Its indifference to man is well expressed by John Stuart Mill who said that "nearly all things which men are hanged or imprisoned for doing to one another are nature's everyday performance". The most famous exception to the modern picture of nature is Spinoza's belief that man is united with the whole of nature. The presentation of some of these conceptions may be seen elaborately for making the relations of man and nature more convincing and clear on account of the environmental ethics.

MAN-NATURE RELATIONSHIP: MANY FACES

What follows that according to Aristotle nature consists of the whole universe which is a

self - enclosed system of changing things, such as, acorns, trees, persons and planets, each inspired to realize its most nearly complete form or end. The ends and the way nature works are all comprehensible to man's intelligence. Human skills and crafts simply shape the ends nature itself is trying to realize. To understand anything is to know the causes of things. And to know the causes is to know (a) the *end* for which anything is done which Aristotle called its final cause, (b) the *material* cause which is that out of which things are made (c) the *formal* cause which is the shape or design to which something is constructed and (d) the *efficient* cause that which brings the material into form for the sake of the final cause. This description is perfectly seen in his famous essay "The concept of Nature" (Aristotle, 1930). And what is important that he himself has said :

"If then it is both by nature and for an end that the swallow makes its nest and the spider its web, and plants grow leaves for the sake of the fruit and send their roots down (not up) for the sake of nourishment, it is plain that this kind of cause is operative in things which come to be and are by nature. And since 'nature' means two things the matter and the form, of which the latter is the end, and since all the rest is for the sake of the end, the form must be the cause in the sense of 'that for the sake of which' It is plain then that nature is a cause, a cause that operates for a purpose" (Aristotle, 1930).

Thus, man's place in nature is secure. He is the highest product of nature because he has the ability to turn back and understand nature's working. Man and nature are part of the same intelligible order. However, the result of knowing the causes of things, according to Aristotle's conception of science, is not control and management of nature, but contemplation and understanding. For Aristotle, to explain something is to define it more clearly.

But, in Galileo's "Two kinds of Qualities" (Galileo, 1957) the picture of an entirely different world and different conception of science is presented. Nature, for Galileo, was a mechanical system undergoing quantitative changes describable by mathematics. Only the quantitative and the measurable are intelligible and real; all else fails outside the scope of nature.

Particles of matter have size, shape, number, and rates of motion that are quantitative and objective, their color, sound and odor, and indeed, all else that human consciousness is aware of, are qualitative and subjective. This decisive step that Galileo took in writing man out of nature has had many far reaching implications for the development of science, the natural environment and human culture. Nature is not merely an object of contemplation, and the laws of man do not operate in nature, nature as conceived by Galilean science is to be managed and controlled. As Francis Bacon expressed it, knowledge is power over nature. In "Two kinds of Qualities" Galileo conceives an order of causes that is entirely different from that used by Aristotle.

Moreover, the description and the control of the nature moves deeper than it seems. Some view that if an event in nature can be predicted, then it can be controlled. This follows from the simplification that Galileo imposed on nature was significant in developing a highly potent science of predication. This conception of science is also reaffirmed and brought up to date by Carl. G. Hempel in his "Sceintific Explanation of Events and Actions" (Hempel, 1967). According to Hempel, the gain in control is at least partly offset by radical changes in the conception of man's relation to nature. These conceptions are:

- (i) The whole of nature is no longer intelligible to man, only the part that is amenable to mathematics.
- (ii) Nature, so delimited, is a blind, lifeless thing that could not possibly be the locus of values or have intrinsic worth. Thus, man is now viewed as an alien in this world, and his life of consciousness belongs to another order of things.

Rene Descartes brought out the implications of this alienation in his "Man Separated from Nature" (Descartes, 1931). It is implied as the two-substance view of the dualism of mind and body. Descartes gave importance to what Galileo had recognized only as subjective qualities by putting into a world of its own all the conscious life of man, his ideas, sensations, hopes, wishes and into another separate world everything that is physical i.e. man's body as of Galilean particles and physical nature. This picture of human consciousness as distinct from physical nature has

far-reaching consequences. Although the important and dignity of man has been saved because man is not reducible to physical matter, great problems remain. What a person essentially is, his conscious existence, functions out of all connection with his body and the world. It is a mystery how any one can perceive the physical world, and how a simple movement such as raising one's hand can be brought about by an act of will that is not at all physical. The point is to see that Galilean science separated man from nature, and Descartes pictured man as almost exclusively mind, his body being merely another part of the Galilean world.

In broadest terms, it may be observed, the entire philosophical programme is seen a continuously more refined working out of the relationship between man and nature. The various views of man's relationship to nature which developed in the history of thought reflected the unique perspectives and levels of understanding which the knowledge and culture of different historical periods made possible. These views differ not so much over the obvious point that man, physically and biologically, was in fact a part of nature. However, they differed more fundamentally over man's knowledge of nature, and over the problems and possibilities which arose in man's use of natural knowledge to develop and further his ends. They differed, in other words, more over the question of what man's undeniable naturalness meant and implied in terms of knowledge and the conduct of life, than over whether man was or was not a natural being, or whether his naturalness precluded or involved forces beyond nature.

So far we have seen that the different conceptions of the relation between man and nature have succeeded in constituting an optimistic conception. Because when it comes to the question of gaining moral knowledge from nature, to be sure, many of the philosophers have seen no reason why the laws governing human nature could not be ascertained as easily as laws governing physical phenomena. Spinoza emphatically contends that "the chief good of man is that he should arrive at the knowledge of the union existing between the mind and the whole of nature In order to bring this about", and again says Spinoza, 'it is necessary to understand as much of nature as will enable us to attain to the aforesaid

character..." (Spinoza, 1930). John Stuart Mill, however, was dissatisfied strongly with Spinoza's notion that what is morally good for man can be gotten from a study of nature that reveals an ultimately harmonious unity which, once recognized, will enable us to live in beatitude. Mill exclaims that "It can not be religious or moral in us to guide our actions by the analogy of the course of nature.... No one, either religious or irreligious, believes that the hurtful agencies of nature, considered as a whole, promote good purpose, in any other way than by inciting human rational creatures to rise up and struggle against them" (Mill, 1950). According to Mill derivation of human values from nature contradicts human nature. As he says, "All human action whatever consists in altering, and all useful action in improving the spontaneous course of nature" (Mill, 1950). We should not merely study nature with an eye to following her pattern; the duty of man lies in "Perpetually striving to amend the course of nature-and bringing that part of it over which we can exercise control, more nearly into conformity with a high standard of justice and goodness" (Mill, 1950).

What it implies is that the disagreement here between Spinoza and Mill is only one example in the history of thought of conceptions of the man-nature relationship which are at odds because of values. It exemplifies what has been the fundamental problem dividing most theories of man and nature i.e. the question of the derivability of moral knowledge from nature. The important theories of man's place in nature, as can be seen, come down to some version of the disagreement between Spinoza and Mill, i.e., whether nature contains the normative ingredients for the construction of human values.

At present scientific social situation our position of appreciating man-nature relationship would come closer to Mill than to Spinoza. We would also agree with him that it is trivial to say that man acts 'according' to nature. In this man cannot help himself, since 'all his actions are done through, and in obedience to, some one or many of nature's physical or mental laws' (Mill, 1950). Mill, however, admits that though part of nature, man's unique function, his duty lies in controlling and transforming the natural world, not piously seeking its guidance. This is profoundly impre-

ssed by us as the entire edifice of our civilization is built upon it. The Baconian conception of science as control over nature is not only an intellectual presupposition of ours, it is a deeply implanted emotional attitude as well. Mill's conception impresses us having no point of disagreement when he says;

"Everybody professes to approve and admire many great triumphs of Art over Nature: the junction by bridges of shores which Nature had made separate, the draining of Nature's marshes, the excavation of her wells, the drgging to light of what she has buried at immense depths in the earth: the turning away of her thunderbolts by lightning rods, of her inundations by embankments, of her oceans by breakwaters" (Mill, 1950).

This message of Mill confirms us that science is a mechanism of discovery and control, there is no suspect about it. But its disclouser about nature tells us, in themselves, very little about how we should be moral. Here again we are against Spinoza. Science reveals the facts of the world, we say, but not values we can follow. Values are man made and articulated by man under social conditions, or even imported by man from beyond nature. Mill keeps this so well when he speaks of our own "high standard of justice and goodness" to which nature must be brought to follow. Our science yields knowledge of means, but not of human ends.

ECOSYSTEM, VALUES AND DERIVABILITY

A philosophical approach to the environment not only makes value questions central, it implies also a new approach to the study of value. Philosophy has always thrived on the examples set by the work of the various sciences. In the case of the revolution of environment, philosophy has recourse to a science that has been quietly at work on environmental problems for nearly one hundred years. That science is ecology (Thomas, 1956, Odum, 1963). Ecology is a branch of biology that studies relationships between organisms and their environment on a variety of different levels of organisation ranging from individual, population, community, eco-system and finally biosphere. Ecology is not a generic science like physics or chemistry. It is, according

to Marston Bates's distinction (Bates, 1960), a 'skin out' rather than a 'skin in' science. Ecology starts with observable physical organisms whose internal makeup it must leave to the basic sciences and proceeds to investigate their interrelations with other organisms and the non-living members of the environment. In an ecological framework the emphasis is not on individuals, but on groups and communities of organic life. That is, ecology is primarily interested in systems of interrelationships and interdependencies which ecologists call ecological systems or ecosystems. Both 'community' and 'ecosystem' are focal terms in ecology and so man's ecosystem is the highly complex network of environmental activity which contributes to the life of the human community as observed by Peter Singer (Singer, 1979).

Since the consequences of our sophisticated technological techniques have created the environmental crisis (Singer, 1979), it follows that the ends we have followed are suspect by implication. The search for a new theory of man's concern to the environment therefore centres around the search for a new conception of the ends and values which guide the techniques we employ so far a perspective environmental ethics is concerned.

No doubt, this presents the great unanswered question of modern philosophy i.e. the problem about origin and ground of value. We have remained in a moral circle where the controversy is still swung back and forth between the polarizations of subjectivity and objectivity, relativism and absolutism. Our lives are grotesque mixture of elements of convention and timeless virtues. In spite of all our technological achievements, we suffer from a deep seated gnawing that human life is only the knocking about of one arbitrary view against another. Today's turbulent expressions of ideals of political and social reform are reflections of this malaise. But neither they nor the remedial efforts could be successful if they do not attempt to resolve the issues regarding values and value-preference in respect of the relation between man and environment.

However, in case of environmental ethics we teach about certain kind of ethics. This is, of course, environmental ethics. Environmental ethics can not create new values, rather it can

solve practical problems of the environment by applying the values those are available in a moral circle. But environmental ethics as an aspect of environmental perspective, it can also identify the potential means for solutions latent within ecological settings undergoing crisis and direct them in broad utilitarian terms (Hare, 1987) capable of regulating and encouraging inquiries in more specific problems and in practical fields. Such, at any rate, is the opportunity afforded environmental awareness by the ecological evolution. Ecology provides a model to environmental awareness and to other human sciences of a new way of viewing the interrelationships between the aspects of the environment. Central to its perspective is the idea of ecosystem analysis and the concepts of the balance of the environment. The balance of the environment provides an objective normative model which can be utilized as the ground of human values. It is, of course, no Platonic absolute, nor is it an empty formalistic principle in a Kantian sense. It is simply a articulation of what has been observed to be a relatively constant pattern in the behaviour of natural communities. Like any scientific articulated generalization, it is subject to change. Nor does the balance of the environment serve as the source of all our values. It is only the ground of whatever other values we may develop. But these other values must be consistent with it. The balance of the environment is, in other words, a kind of ultimate value as it performs the regulating and governing function of an absolute without at the same time possessing absolute ontological status. It is a *natural* norm, not a product of human convention or supernatural authority. This rationality remains with it. It is linked to environmental ethics which plays the role as an aspect of environmental education while it says in effect to man: "This much at least you must morally do, this much you must be morally responsible for. You must at least develop and utilize energy systems which recycle their products back into the environment. Whatever else you attempt must be consonant with this fundamental requirement".

Given that, when we turn to the concept of environmental ethics, it is easier to see what it means to say that human values have a root base in ecological relationships. For environmental

ethics is the study of man's moral responsibility, pertaining to the complicated networks of ecological chains and variables that function in environmental processes. From the ecosystem point of view, what is important to human understanding is knowledge of the myriad ways in which man's activities depend upon environmental variables such as size, density, temperature, noise, configuration, proximity, color, and many more. These are variables of the physical environment, and for the most part they have been neglected. We have much descriptive knowledge of the size of things, the size of our cities, populations, and the minute dimensions of the millions of mechanical devices we have produced. But we have hardly touched questions of man-in-relation-to the size of this or that. The reason is that our science and our civilization are not used to looking at things ecologically. Our anti-ecological bias is best seen in the education we all receive in one shape or another. We are brought up to regard man as the sole actor in history in relative isolation from the influences of environment. History is presented as primarily the social record of man, with only incidental reference to environment. The bifurcation implicit in this goes a long way to account for the perpetuation of the ecological crisis of our time.

In environmental ethics, the value question gets its answer when we believe in that human values are founded in objectively determinable ecological relations within the environment. The ends, to say, which we propose must be such as to be compatible with the ecosystem. This will not restrict creative disagreement about specific values, but will provide a naturally defined domain within which such disagreement can take place. Thus the construction of value may be said to be what some naturalists have called an 'objectively relative' process. Relativity obtains within the inner limits of human affairs, in the countless matters of individual taste, choice and obligation. But beyond cultural relativity, values meet the objectivity of basic ecological limits, and these provide barriers against the open end of relativism. The picture of a human society based on ecological sanctions is not one in which freedom is reduced. On the contrary it represents the only basis on which genuine development of the individual to the fullest is possible. It is not

surprising to find that we have the strongest protestations against the loss of individual liberties in modern scientific societies which on the whole ignore ecological controls, and which in practice are committed to an open-ended moral relativism (Passmore, 1974).

With regard to the prospects of environmental education and by environmental education if we mean educating the masses about the environment, environmental management, environmental variables, dynamics of ecosystem, environmental effects on human population or community and other non-human communities, the preservation of environment in relation with making people conscious about the relationship between human and environment or non-human and environment etc., here as regards to moral knowledge, the standard objections against the derivation of values from the environment lose their force when the ecosystem approach to values is considered. The moment man-in-nature, instead of man and nature, is made the subject matter of moral inquiry, value questions are inescapable. Integrated ecological investigation is concerned not merely with the descriptive properties of environmental variables. The very question at issue is how ecological population or community is affected by the variable in relation to the normative pattern of the ecosystem to which it belongs. The outcome of judgment here is only partly descriptive, in a more fundamental sense it has to do with the relative impairment of an organism or community in the context of the norms of the ecosystem. When a biologist studies a fish kill resulting from the misuse of pesticides, his scientific judgment of the relationships upon which the occurrence depended clearly carries a normative force from the stand point of the fish and their ecosystem. Here, for me, there is no difference between this kind of ecological judgment and a similar one concerning man. In fact in some areas of scientific investigation where environmental analysis is undertaken, we feel environmentalists are engaged in construction of values much of the time. The argument that, since man is himself a part of ecosystem, his inherent subjectivity vitiates all attempts to derive values from natural processes. The presence of subjectivity in normative behavioural study is not a deterrent to scientific determination, but a

positive boon, provided that the results of inquiry have the opportunity of being tested in concrete social situations. The paucity of such opportunities, rather than the theoretical constructions advanced by ethicists or philosophers, is the main reason for our reluctance to think about the plausibility of deriving values from the environment itself.

CONCLUSION

To conclude, an environmental approach to human values offers a basis for educating that morality has its ground in the environment, providing us thereby with the normative foundations for a new look at man's relationship to the environment capable of redirecting the vast thrust of our civilization along more stable ecological lines. Given with a synthesis of the two paradigmatic theories of man-nature relationship propounded by Spinoza and Mill, now, at a time in environmental crisis when the solution of practical problems requires more than ever before a viable approach to value, we have in the ecological evolution the means of realising this dream centuries. The solution of the practical problems of our environmental crisis lies in practice itself. To this, at any rate, an effective environmental ethics may help us in finding ways of going through such practice.

KEY WORDS Eco-based Value System. Environmental Ethics. Ecological Relations. Moral.

ABSTRACT Given with the scientific conception of environment this paper attempts to highlight the nature of values and the rationality of value-derivation in relation to a revolutionary perspective of environmental ethics.

Environmental ethics as a topic of applied philosophy implies man's moral obligation to environment. If our such moral obligation is based on ecological relations, it brings certain substantial changes in the traditional constructions in ethics. These inevitable alternations lead us to realise that the question of environmental ethics is the question of the environmental responsibility and the ground of human values lies ultimately in the heart of the man-environment relationship under eco-scientific considerations. Accepting this view point it can be said that human values have a root base in ecological relationships and I conclude that a viable approach to values is yet an imperative need.

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Author's Address: Satrughna Behera, Lecturer, UGC-Academic Staff College, Sambalpur University, Jyoti Vihar 768 019, Burla (Orissa), India