

PHILOSOPHICAL ECOLOGY

Extensive Scope of Ecology as an Environmental Science :

Ecology, though originally a branch of Biology, studying the interrelations of the organisms and their environments, very soon developed into a major interdisciplinary study with various sub-branches within it. There are many different kinds of organisms ranging from the micro-organisms, insects, birds, aquatic and terrestrial life upto human beings. Similarly there is diversity in the environment, the physical comprising of the five elements and the biological comprising of all the living creatures. These together form the natural environment. To this is added the artificially produced environment due to the diverse kinds of deliberate activity on the part of the human species. The most important of these is the environment brought through technology. Though we are wont to speak of the organisms and the environment there is no such exclusive dualism between them. Not only do the various living creatures constitute one another's environment, but together the entire animate existence itself also forms the environment of the inanimate physical existence. The animate and the inanimate sphere each affects and is affected by both internal as well as external environment. Thus everything is an environment in relation to everything else. This being the case we speak of ecology broadly as the environmental science. In this the larger is the ecosphere, smaller is the biosphere, within it is the human and the technosphere.

But since environment is a relative term in relation to that for which it is an environment, anything in the universe, and particularly on the earth in which man is immediately interested, is both an environment as well as a subject of an environment. Thus the whole existence constitutes an organic whole. It follows, therefore, that ecology cannot be restricted to the narrow field of

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a branch of Biology. It far exceeds biology and extends to the study of all existence in organic relation. In a sense the entire existence as an organismic whole is a subject-matter for biology.

Ecological Awareness is a new dimension of each science :

To suit our practical purposes we have divided the whole existence into different aspects or parts for each of which there is a specific science. Thus each science provides information regarding an aspect of the total environment. Thus, for example, the physical science studies the laws of behaviour of material bodies in relation to one another and its impact on the rest of existence whether inanimate or animate. It is also compelled to study reciprocally as to how the physical subject-matter also lends itself to the impact of its varied environment. This kind of awareness is novel to each of the sciences. This awareness is the ecological or the environmental awareness from which point of view of the new dimension each science has to make its own contribution. Thus each science has a specific subject-matter of its own and in addition it has to make an environmental approach towards its own subject-matter as well as to the other subject-matters of other sciences though not specifically its own. Thus under the environmental study all sciences enter into one another, making ecology an inter-disciplinary study par excellence. It is interesting to note that each science studies the 'behaviour' of its own subject-matter.

But the term 'behaviour' is biologico-psychological. Nonetheless we speak of the behaviour of the physical bodies and the chemical elements, as if the characteristics of the biologico-psychological behaviour are in some measure applicable to the former and that there is some continuity in them. This is not merely an accident but reveals the essential truth of nature.

Ecology becomes Philosophical :

Usually each science studies the uniform patterns of behaviour of its own subject-matter depending upon how a single cause produces a single effect, but that does not at all throw any light upon the collective results of infinite causes of diverse types simultaneously operating on one another, excepting that somehow the whole world is wonderfully kept in a sort of orderly balance or equilibrium. The term ecology also stands for this inherent balance of nature.

It is not within the ken of any single scientist or a group of them to draw a detailed picture of the interrelations of all the things and events that take place in the entire nature, world or universe depending strictly upon the empirical method of investigation. It has to take recourse to the speculative method of philosophy.

Perhaps there is no other discipline which comes so very near to philosophy as ecology. In the one case, though taking an environmental approach it is concerned with the understanding of the whole of nature or reality. And indeed this is the main business of the philosopher to do. Hence ecology is essentially philosophical in its character. It is of course, true that like any other scientific discipline ecology is primarily empirical in character. But as just we have seen, it is impossible to make an exhaustive empirical study of the infinitely complex workings of nature, though we can progressively make an increase in our understanding of the complexities of nature. Hence whatever cannot be fulfilled empirically has to be complemented speculatively as far as possible in consonance with and without undermining our empirical knowledge of nature. As rational human beings we cannot remain satisfied with keeping gaps in our knowledge. Hence it is very reasonable to speculate and have a critical thinking view of things and to understand what ultimately the reality as a whole is like. Ecology thus begins as a natural science but soon becomes a human and cultural study.

Ecology stimulates philosophical re-thinking :

Men build civilization by the pursuit of the natural and social sciences, arts, crafts, technology, literature, philosophy, politics, morality, religion and so on. It is necessary from time to time to take a comprehensive stock of all human achievements. One of the major functions of philosophy is to make such a grand synthesis. We thus know where the human being stands at present and what action he can take to build his future. To assign such a function to philosophy is to make it progressive because the data on which it is based are themselves progressive. The recent growth in ecology, and its impact on many different fields of human intellectual and other activities, has given a new spur to philosophical thinking. Thus a philosophical comprehension of ecological findings and their implications has become a pressing demand. Philosophy, to be fruitful, should have a feedback of human achievements; and to

be meaningful, sciences and arts should have a philosophical basis and guidance.

Interrelation between Man and Nature :

Of all the problems of human and cultural ecology, the most vital one from the philosophical point of view is that of the interrelation between man and nature. The phrase 'man and nature' suggests a sort of exclusiveness and dualism between them for which there is no warrant.

Neither the primitive man nor the human child alienate himself from nature. On the contrary a sort of animism is spontaneously experienced by them. Ethnographers say that in the primitive culture, man, nature and supernature are unified in a sort of moral order. The relationship amongst men is spontaneously social. Nature is bountiful, and if there is a wrath on the part of natural forces, which are defied, they believe that their prayers will be responded and calamities alleviated. There is a relationship of family kinship in which man, nature and diety naturally care for one another. The primitive man lives in the concrete world rather than think in an artificially created abstract world.

Man in the recent centuries developed an attitude of mechanistic understanding of nature during the Newtonian period. Then came the evolutionary attitude due to Darwin. Further there came a dialectic relation between man and nature each affecting the other. But in all these the original animistic attitude of wholeness was lost. Nature became an epitomic example of unconscious existence.

The feeling of alienation of the modern man from his fellow-beings and from nature is the result of sophistication brought out by the technological civilization.

Nevertheless a thoughtful understanding among the philosophical thinkers, whether the classical materialists or the dialectical materialists, the existentialists, the pragmatists or the idealists, is that there is a basic unity of being, nature or reality. though their modes of description and explanation of this unity take on diverse forms to suit their basic ideologies. What is necessary however is to see how nature is not an unconscious object alien to human existence and subject to be treated as merely a means for his material well-being.

Man theorizes but Nature displays knowledge in operation :

Knowledge is theoretical and practical understanding. There are persons who differ in their capacities of such understanding. Some have theoretical knowledge, but are weak in their practical application or understanding. While some others have a better practical understanding, they do not theorize. It is a well-known fact that practice comes first, then comes theory. There could be practical knowledge without the theoretical understanding. The practical knowledge does not cease to be knowledge even in the absence of theorization. Theoretical knowledge may have its own values; it may even in a sense add to the value of practical knowledge. But the theoretical knowledge does not contain anything more than what the practical knowledge provides. The theoretical and the practical or operational are two different modes of the same contents of knowledge.

Nature in a way could be regarded as a repository of practical knowledge and the scientists only try to analyse this practical, operational knowledge of nature to build a theory or theories out of it. In so far as understanding is concerned, they do not add to nature's prevalent knowledge but only copy it, unearth it, discover it. Thus man only theorizes what nature actually displays in its operation. Therefore it is a mistaken assumption to equate knowledge with theoretical knowledge and value it as the only knowledge worth its name.

Nature is both the source and the sanction of human knowledge :

Man's theoretical knowledge is deduced from the study of the behaviour of nature. Man, in a dialectical relation with nature, only, observes nature actively. He may reproduce a part of nature artificially and concentrate his study of nature in an experimental way. He makes an analysis of the observed phenomena and notes down his findings. He makes a thorough analysis of natural phenomena. He summarises the results of his observations in certain sets of formulae. All this constitutes human knowledge. In building this theoretical knowledge man makes the best use of his senses and reasoning in all its forms of classification, comparison, systematization, evaluation of evidences, formation of judgements and so on. All this we prize as very valuable acquisition of knowledge.

The application of the principle of verification in empirical sciences is nothing less than man's appeal to nature for getting her sanction. Nature thus is the final judge of the truth of human knowledge. It is nature itself which provides this knowledge to man. Man does not put nature into order, he only follows the order which is inherent in nature. When it is evident that man derives his knowledge from the study of nature, then it really follows that nature is the original storehouse of this knowledge, and this knowledge is not in the static, dead formulae whether in symbols or explicit statements, but it is a live knowledge, knowledge expressed in the processes of nature. Is it not really then, a parody of facts when we regard man to be in the know of things while regard nature without knowledge? Should we indeed dub nature as dull, insentient, unintelligent, unconscious, dead matter?

Nature, Library and Consciousness :

Man's knowledge is expressed in language, very often, for the sake of convenience, in symbolic forms, which has its own advantages of simplicity and economy. This knowledge is stored in piles of books. These books again are stored in the libraries. We are indeed very proud of our big libraries, whether public or personal.

Let us compare our libraries with nature. Neither the books individually nor their collections in the library have any consciousness of the knowledge with which they are richly replete. But inspite of the absence of consciousness or self-awareness on the part of these books and the libraries we do look upon them as priceless possessions of knowledge. We have indeed only transferred the knowledge which nature possesses from the nature to the libraries. The forms of nature and library are different but the contents of their knowledge are the same. It is not merely a metaphor to say that the scientists read the book of nature. Unless they could read and understand the book of nature they could not have been able to write the books in their own languages. It appears nothing more than a transcription from the language of nature to the language of man. If the library is not without knowledge, nature too is not without knowledge inspite of the absence of awareness in them.

It is not necessary for nature to be conscious of its knowledge, for such kind of knowledge is found even among men. We need

not be conscious of all knowledge which we may possess. We are not always aware of all the knowledge which we have acquired. All that is relegated to the unconscious. That part of it which is required for some purpose in the present is called back to consciousness. We are therefore said to possess memory which is a storehouse of knowledge. Therefore, to possess knowledge and not to be aware of it is not a contradiction. Hence we need not find fault with the position that nature is full of knowledge and yet is unconscious of it. Nor should we suppose that nature cannot be in possession of knowledge only because of the complete absence of awareness of the presence of such knowledge.

Nature is the source of human consciousness :

The question of consciousness or awareness does not appear to be that significant. Bare awareness of knowledge does not make any addition to the contents of knowledge. We assign a superior position to the human beings in comparison to nature, because of the presence of consciousness in him. Because of this distinctive quality he has the capacity to understand nature. He may take pride in this. But certainly he does not give knowledge to nature, rather he takes it from nature, and he has only this additional awareness of what he owes to nature. He need not make too much of the presence of this self-awareness which nature does not appear to have.

Again, the ultimate cause of man's knowledge and his awareness must be traced to nature. Man is a part and parcel of nature, and hence man's knowledge is also a part and parcel of nature. If man has produced knowledge, nature is responsible for producing man; thus in the final analysis, human knowledge is the product of nature itself. It is nature's potentiality to give rise to human knowledge along with the additional awareness of the production and possession of knowledge. Man really cannot claim anything for himself which is clearly and specifically his own over and above which nature has given to him. It is really well said that in and through man nature has come to self-consciousness. Ultimately human consciousness is nature's own consciousness. Nature has made man know. Man has learnt from nature and the capacity to learn from nature also he owes to nature. Unlike the human teacher or the Guru, nature does not simply teach but makes the man capable of receiving this teaching. Man has thus got from

nature both the contents as well as the capacities of knowledge. It is nature which has given these gifts to man.

Nature surpasses Man in Knowledge :

But even with the possession of awareness or self-consciousness man may not necessarily know everything. Surely his knowledge is very limited. Even the best of knowledgeable men are vastly ignorant. The human abilities of learning and knowing and remembering are all very limited. Each one of the human being who knows, knows but very little, while nature is in full possession of unlimited knowledge, man has only bits of knowledge here and there, of this and of that. It is almost impossible to know all that nature knows. Even so far as man has not discovered all that nature possesses, and as on his own honest admission man's ignorance is overwhelmingly greater than his knowledge, all his knowledge put together can hardly equate nature's knowledge. In this, nature as a whole far surpasses mankind even as a whole.

Human Awareness Compatible with utter ignorance and negligence :

Take for instance, the human organism. Man who prides himself in self-awareness may be utterly ignorant of the functioning of his own body. Mere self-awareness does not make him aware of what his body does. Human organism, and for that matter, any organism as such, is so vastly a complex system of the systems of organs that it passes human comprehension. Each individual does not know, only the physiologist who may have studied human physiology may alone know as to how the various systems within the individual body function at once on a grand and a detail scale. They function on the unitary scale of the body as a whole in cooperation with each other. Each organ within the system of the body has its own way of functioning and ultimately contributing to the well-being of the body as a whole. The digestive system, the respiratory system, the blood circulation system, the nervous system, the system of each sense organ and the motor organ, each one of these is functioning according to its own minute and complex structure and also simultaneously in cooperation with the rest of the system to maintain and preserve the unit of the body as a whole. Each one of these systems is indeed so very complex that different doctors have to specialize in the study of the different organs. Each man owns his body as really his own, but he is

conspicuously and profoundly ignorant of its functioning inspite of his claiming to be a self-conscious person. His self-consciousness does not come to his help if anything goes wrong in this system. He has to consult the specialist, and often a meeting of the specialists may not be able to make a correct and convincing diagnosis. With all the expert knowledge they do possess they have to make explorations and conjectures and experiments in the dark. They may accidentally hit upon the correct solution.

As a matter of fact it is a great contribution and merit of nature that it leaves man free to work in the interested field of his own, taking on as it were the responsibility of maintaining the physiological and the psychological processes intact, without bothering him to take notice of them from moment to moment. Of course a good deal of cooperation is expected by nature of man if his natural organic system is to function smoothly and without trouble. It may also be added here that this kind of cooperation expected by nature of man, is indeed expected on a much greater scale when in the technological civilization he is making encroachments on nature. But as we know men are often careless regarding their individual health and similarly they are very dangerously careless about the humanity's health in general.

The point is that nature cannot be regarded as inferior to man simply because of the apparent unconsciousness on the part of nature and the presence of meagre consciousness on the part of man.

Argument for the spiritual nature of reality :

The strongest argument in support of the spiritual nature of the ultimate being may be formulated as follows. Originally there are two possibilities, either that there is being or that there is nothing. The second possibility though logically thinkable cannot be taken into consideration, for actually we are faced with being rather than nothing. Being alone could be. But then this being could be either intelligent or unintelligent. But which of these could have the *potency to be*, the intelligent or the unintelligent ? That which can spontaneously put forth itself, that which can independently bring itself into reality, that which possesses in itself the potentiality to be, of necessity has to be conceived as intelligent. Thus both nothing by itself as well as unintelligent being are out of question. The very fact that being is implies that it has to be intelligent. If some one thinks that being could as well be unintelligent, then such
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an unintelligent being cannot know that it is. Unintelligent being or matter is as good or as bad as nothing. Unintelligent being is as much impossible as nothingness.

It is possible for the intelligent being or the spirit to conceal itself and put on a show of nothingness. It may go into self-oblivion. It is also possible for it to put on an appearance of unintelligibility and show itself as matter. The converse of it is not conceivable. Absolute nothing cannot put on a show of being, whether conscious or unconscious. Nor can the absolutely unintelligent matter appear as intelligent.

Metaphysical and Epistemological Idealism :

Thus the ultimate being or reality has to be spiritual. This metaphysical idealism cannot be avoided. But the nature of the above argument in support of such metaphysical idealism is epistemological in character. We have taken into consideration speculatively the logical or epistemological possibilities of being or nothing, of its being intelligent or unintelligent. It is in terms of knowledge that the meaningful questions regarding being could be put and answered. Excepting for knowledge being is no being. We can take an ontological standpoint so far as our knowledge can allow it. There can not be an absolutely ontological standpoint devoid of, independent of, or exclusive of knowledge. The very idea of standpoint is epistemological. In short, reality minus experience or consciousness is meaningless. This is both a metaphysical and epistemological idealism in which there is identity of being and consciousness. The insistence of some thinkers upon the priority of being over consciousness and of the separation of the existence from essence is only conceptual and methodological not real.

Scientific, Artistic, Moral and Religious approaches to reality are all legitimate :

This being is the sole source of both nature and man. Both of them are grounded in the same reality. In the chronological evolutionary order being puts forth itself as nature composed of the five elements conditioned by space and time, which nature we call existence. Science can confine itself to this existence in space and time, applying the principle of empirical verification for the understanding of nature. But such scientific knowledge can not

be regarded as exhaustive of the reality of nature, both in its transcendental and manifestative aspects.

Scientific approach to nature, though practically as well as theoretically very important and valuable, is not the only way of understanding nature. Only a certain kind of relation between man and nature leads to what we call scientific knowledge. Here the relationship of man to nature is cognitive, empirical, analytical and conceptual. This relationship is legitimate, but it is not all. Man also has other relationships with nature, both external and internal to him. He can also establish an affective and conative relationships with nature, which reveal the characteristics of nature other than the ones which are revealed to the scientific approach. The aesthetic or the artistic, the moral and the religious approaches are as much humanly valuable as the scientific. These approaches are neither arbitrary nor false. They have as much claim to the understanding of reality as the scientific. These approaches stand for the different values in the human experience.

Axiological Idealism :

These values are embedded in the man-nature or subject-object relationship. That is, they are in the very structure of reality as determined by the total environment in which man and nature are both involved in a dialectical manner. The experience of the values of truth, goodness and beauty, each in its multifarious forms would not be possible unless these values were really there in the very nature of thing as they stand in relation to man. Therefore trying to understand nature in one way only by the application of the empirical method, and equating the nature of reality with this kind of knowledge only is to do justice neither to nature nor to man. There is more in nature than what it lends to science. What science finds of nature is indeed true in that relationship of man as scientists; but what he finds thus is only an aspect of nature. There are other treasures of nature which remain concealed and for which the other approaches are to be employed. Reality does lend itself to these other approaches of the technologist, the artist, the moralist, the religious devotee or the mystic. They represent different yet complementary values in the life of man. These all could be comprehended under an axiological philosophy of reality in relation to human experience. This means that we realize also the valuational character of reality. To assign value to reality is

not any arbitrary superimposition on it because reality does lend itself to such valuational approach. This is what is summed up in the phrase 'axiological idealism' according to which reality reveals its value structure as ideal and perfect.

Man-in-nature and nature-in-man :

It is wrong to suppose that nature is simply outside man as is sometimes suggested by the ecologists when they use the phrase 'man-in-nature' to show the very intimate relationship between them. Nature is also as such within man as it is supposed to be outside him. Man has his nature which makes him human. With this intrinsic nature he stands in relation to the apparently extrinsic nature. Man is in a sense a part of nature, but in a sense nature is also a part of man. Therefore we cannot understand nature apart from man. It is in man's *nature* to experience and appreciate values. He knows nature and appreciates its values. He approaches nature with his valuational make up. He brings his values to bear upon the outside nature, to which nature lends itself. Man cannot, live as a human being successfully and happily in the natural environment if it were inherently antagonistic to human values as if nature has nothing to do with them.

Whatever comes to be revealed of the ultimate spiritual being as manifest in the man-nature relationship is true so far as that relation goes. Indeed very valuable features of reality are revealed in this bilateral situation as determined by the apparently dualistic inter-relationship of man and nature. Being or reality is the cradle of both nature and man. Being stands at the back of them. It is both immanent in them as well as transcendent to them, because the entire being is not exhausted in its manifest form. In the metaphysical language it is called Absolute or Brahman in the religious language the same is God. As Absolute it is beyond all characterization or *nirguna*. As God the same is *saguna* and characterized as omnipresent, omniscient, omnipotent. He is the source of all values and wisdom. Thus both nature and man have a spiritual or divine origin. They are sustained in and by divinity and have a divine destination.

The message of Idealistic Attitude to the Technological civilization :

In the present technological civilization the man-nature relationship has caused a real anxiety, because of the upsetting of the

harmony and balance of nature in which the inanimate and the animate are sustained. This is the concept of *dharma* as the *dhāraṇā* of the entire universe.

It is indeed natural for man to act on nature and make his environmental home to suit his aspirations. In this human endeavour man tries as it were to improve upon nature. He tries to overcome its resistance thinking it to be inimical. He therefore wants to conquer nature and to a certain extent is successful. He begins to look upon nature as a maneuverable object or tool. Technology becomes his way of life, and utility as its value. Economic rate of growth, increase in the per capita income and national wealth are the criteria of the measurement of the general welfare in which more attention is paid to the quantitative aspects than to the real quality of life. There is a real tussel between the *standard* of life and the *quality* of life. It is a well-known fact that wealth accumulates and men decay. The concept of welfare has to be so enlarged as to bring within it non-measurable aspects of spiritual life. In which utility though a value cannot be the most important value.

Nature and man are equal partners in the building of culture and with this consciousness nature is to be treated at least in a friendly manner; though nature, because of its basically spiritual nature deserves to be more reverentially treated. There is an idea of having more technology in order to overcome the evils of technology. This may work to a certain extent. But the basic need is to change the attitude to nature. Because technology is based upon the exploitation of nature by the animal in man.

The human awareness put against the unconscious matter has only resulted in the enhancing of the egoism of the human species. This egoism makes man beastlier than the beasts. Added to this sense of egoism of the species, man as much turns against other men as he turns against nature. Our human world today is inimical simultaneously to nature and to man, as the political ideologies are set against one another. A freak of frenzy on the part of any ideological group may prove to be fatal for all life on earth. This is the greatest danger that man faces today.

This total destruction is possible with the help of both nature and technology. The power of nuclear weapons is ultimately traceable to the power in nature, as exploited by man. Nature thus far excels man both in knowledge and power. If man

continues his present exploitative attitude to nature, she will not care for the survival of the human species. Nature will finally assert itself.

It all depends upon the prevalence of wisdom in man how to adjust in the cosmic evolutionary process of the reality as a whole and promote such values as could be realized for the good of both nature and man.

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