



Journal of Applied Sciences

ISSN 1812-5654

science
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Ecology and Ethics: Some Relationships for Nature Conservation

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Abstract: These days, the reality of environmental crises creates grave doubts about the future of the natural environment. Many believe that if present human behavior toward the natural environment continues, there will be no hope for a sustainable life. Therefore, it is vital that human behavior toward nature be modified and corrected. Although, ethic is traditionally concerned about relations between individuals, but it is getting more attention for modifying human behavior in order to correct human-nature interaction and establish a well-intentioned one. In this respect, we need science of ecology and ethics together. Ecology helps us to understand natural ecosystems and respective regulations and laws, whereas ethics teach us how to define right and wrong behaviors toward the natural environment. This research discusses some possible relationships that might exist between ecology and ethics toward nature conservation.

Key words: Ecology, ethics, nature conservation

INTRODUCTION

Available evidence indicates that environmental damage caused by humankind's life styles results in global climate warming, desertification, water and air pollution and changes in basic ecological cycles (Cairns, 2004). The extent of environmental damage necessitates the integration of ecology with other scientific fields and the critical need to find ways to live on mother Earth to ensure the preservation of nature. Some believe that while in the past, the environment shaped human beings, in the present humans by virtue of their technology and behaviors are shaping the environment. In other words, the human-nature relationship has experienced a reversal. This new state shows increasing human power to modify his natural environment. If this belief is correct, it constitutes a fundamental change in human-nature interaction that has profound effect on the human role in the environment. For example, environmentalism has long held the idea that the environment determined the human being. However, as of 40 years ago, with increasing knowledge about human activities that are transforming the environment, the idea that humans are reshaping the environment gets more support (Dalfovo, 1996).

Human power has increased as a result of increasing knowledge and the applied use of knowledge. It has given rise to forms of technology that have changed the traditional role of humans in the environment. Consequently, the need arises to re-examine humanity's

position with respect to the environment. This radical shift in human-nature relationship is tied to the start of the enlightenment period and Industrial Revolution in Europe and North America. This period began in the 16th century, flourished in the first half of the 20th century and is known as the period of modernity. The birth of modernity is directly related to the way human beings behave toward the natural environment. The separation of science and religion, i.e., one of the consequences of modernity, has resulted in an emphasis on empirical sciences based on objectivity and sensualistic epistemology (As'adi, 1995). Such attitudes toward science allowed genuine human values, ethics and virtues to be dissociated from scientific discourse and materialistic ones are becoming prevalent for understanding nature and defining human-nature relation. Based on this view, it becomes possible to reduce nature to a simple pile of easily manipulated material objects. For this reason, some believe that the operative roots of present environmental crises must be found in far more secularized or even non-Christian world of nationalism, science and liberalism in the 16th through the 19th centuries (Dobel, 2001).

It should not be forgotten that the Industrial Revolution resulted in growing sciences that aimed to know the nature and complexity of the environment exclude the power of God but, place humans in a dominant position above nature. This happened by relying on a large part of new technologies that rooted in modernity with predominance of instrumental rationality

in scientific discourses (Ahmadi, 1994). Consequently, the natural environment is just perceived as inanimate and unconscious material that could be treated without any responsibility by man. This means modern science and technology possess no limitations to exploit nature.

It should be noticed that the dominance over nature has already been one of the human dreams of the human race and Industrial Revolution was a critical starting point toward the realization of this dream by bringing together better technical power and enhanced tools. Nowadays, being dominant over nature can be mostly seen with legendary progress in technology. Accordingly, man considers himself above nature than in the past.

As a result, we can conclude human in modern age do not have proper and enough bridles for its behavior toward the natural environment and this rampage behavior should be considered as the main root of our ecological crisis. Mohaghegh-Damad (2000) believes that modern sciences, with its removing factor of sainthood, have depleted the natural environment of any spirituality and opened the way for overexploiting nature. Therefore, solutions for environmental crises can not be found in more enhanced technology because; the technology with its nature has caused crises to emerge. Solutions must be searched in revision of human-nature interaction to establish a well-intentioned and consonant relationship between human and the natural environment (Minteer and Manning, 2005).

The human domination over nature per se is neither good nor bad but, it should be evaluated based on human's perception of nature. If we accept Schumacher's idea (Schumacher, 1989), we will probably need to desist from any effort to dominate nature because, in any case man is the loser. It appears that he debates consequences of being dominant over nature in a situation that human's desires and wishes come from our animal traits without any responsibility to put nature into operation. However, human domination over nature, accompanied by wisdom and full responsibility, provides better opportunities for improving and flourishing it beside right-minded exploitation.

The above mentioned facts have been raising the need for a common reference that must be universal to be adequate. Growing opinion suggest that this reference be found in ethics (Dalfovo, 1996).

Equip ecology with ethics: Science of ecology helps people perceive themselves as a small component part of an ecosystem in which all plants, animals and micro-organisms in an area are functioning with each other and non-living physical factors of the environment (Christopherson, 1997). All components of an ecosystem

act and react all together based on the laws of nature. The ignorance of any law or regulation that might exist between the components of an ecosystem can endanger the ecological equilibrium. For example, in an ecosystem like an arid pastureland, herbivorous animals like sheep might feed on verdure. Usually, one hectare of pastureland can satisfy the need of specific number of animals for grazing. This can be stated in animal unit per month (a.u.m). If the number of animals exceeds the pastureland's capacity, the ecosystem will be imbalanced. In this condition, the pastureland ecosystem maintains a new equilibrium by reducing the number of feeding animals. Limiting the animals will be done by a decrease of the amounts of plants and forage production and thus lowering the pastureland capacity. In other words, the natural and ecological processes provide a proper condition to re-stabilize animal-forage balance. But man can disturb natural processes by maintaining the excess animals put out to pasture. Here and after a time, first class plants will be lost rapidly and will probably be replaced by second and third class ones. There is also possible could appear and eventually toxic plants like Spurge (*Euphorbia helioscopia*) become dominant. If this trend continues, vegetative coverage will lessen and decertification will threaten the pastureland. Therefore, a wrong human intervention can change ecosystem function and a new established equilibrium is different from original. Furthermore, it is most probable that new relationships between ecosystem components might be established with the omission of a new species. These changes might also have negative effects on other ecosystems. However, it should be noticed, in spite of referrer mechanism of equilibrium, that the new equilibrium condition could be unfavorable for some species. This fact is true for human beings and the new equilibrium condition might activate an unknown mechanism for eliminating humans from the ecosystem.

The above mentioned mechanism of an ecosystem is of great concern regarding the relationship between present human-nature. If the human behavior toward the natural environment continues as in the past few decades, human beings can not sustain their recent position in the natural environment and the next generation will most probably observe some radical changes in their way of life. For this reason, the role of human in the natural environment should be re-defined.

As mentioned above, in an ecosystem some factors are responsible for regulating all actions and reactions of the components to maintain equilibrium. However, human being can disregard these ecological factors with respect to desired rationality, common sense and freedom. Thus the human race is an only component of the ecosystem

that completely differs from the others and his capabilities demand additional bridles aside the natural. Such additional bridles can be found in human inner self and they have been studying in ethics and application of ethics in environmental sciences like ecology is also known as environmental ethics. In fact, environmental ethics is one major branches of bioethics (O'Neill, 2002) and environmental ethics scientists try to specify right human-nature relationship and identify what ought to and what ought not to toward the environment (Benson, 2001).

Ethics make it possible to establish inner bridles. These bridles prevent people from unfair desires toward nature. We can hold out hope have more sustainable and survivable natural environment with respecting ethical bridles as much as possible. They emerge when the person voluntary limits its selfishness and realizes that other entities also possess rights for life, freedom, happiness and use of resources (Sesin, 2003).

Although the science of ecology has been the most significant factor in the development of environmental ethics over the course of the last century (Goldstein, 1998) however, clarification of environmental ethics can contribute the conservation of environment. This (environmental conservation) could be happen by re-proposing a categorical imperative that has rooted in the person; delivering the presupposition of freedom and responsibility; emphasizing on recalls an ethics of balance and harmony; providing the normative pattern for behavior and finally, by finding an agreement on the meaning of basic terms and issues related to the environment (Dalfovo, 1996).

Understanding the relationship between ethics and ecology contrives to enhance friendly behaviors toward the natural environment. Nevertheless, proper approaches for linking ethics and ecology in different aspects of human-nature interaction need to be found by advocated of preservation of the natural environment. For example, we can refer to biophysical approach. This approach recognizes that natural processes put limits on what we can do and how we do it. From this view, value is grounded in the biophysical realities of energy and matter including the basic laws of thermodynamics (Adolphson, 2004).

CONCLUSION

There is no doubt that we need to understand between us and the natural environment before the natural environmental preservation. Human as a small part of the world ecosystem will lead to understand how this ecosystem works by knowing its laws and respective

processes. This led us to answer the question What about the natural environment. However, it seems that the most important question is How. For example, how should we behave toward the natural environment? How should we respect world ecosystem's regulations and disciplines? Although knowing the natural environment is the first step to preservation, but it is not enough. We need something more to guide our behavior toward natural environment and indicate how we should deal with non-human world.

Admittedly, limiting human desirer and freedom to have a responsible human-nature interaction is an imperative duty in modern age in order to conserve nature from man-made damages. We believe limiting human behavior can be best done by ethics because, it helps people to create ethical relationship to natural environment and forms right behavior toward natural environment by dignifying respective ecosystems laws and regulations. This is possible by establishing inner bridles against overexploiting nature as well as teaching how and why humans should restrict their actions to ensure ecological stability.

Although environmental crises push us to refer proper ethics to find out how behave rightly toward the natural environment, but it is very important to recognize that when we are trying to know ecosystem regulations, the basic philosophical foundations of that knowledge determine its functions. It means if human knowledge is based on sensualistic epistemology and carnal desires, humans will track the way to brutal exploitation of the natural environment. This is an undeniable reason for present ecological crisis and has promoted an anthropocentric ethic. This means human in the present age thinks he/she is superior to the natural laws and neither believes nor respects them. Furthermore, with choosing the technology as idol, the psychic values are to be forgotten or rejected and then, there is almost nothing to preserve the natural environment to be deteriorated by man. This fact makes an emergency necessity for reminding humankind the inner bridles because, man-made laws could not completely control selfish human desires which are directed toward economic, social and political progress. Therefore, environmental ethics is gotten more attentions for preserving the natural environment. It is also more possible to establish the environmental ethics that reinforces inner and constant motives to preserve ecological sustainability by knowing ethics and ecology and their relationship better. This enterprise can be facilitated by knowing both human's inner self and the natural environment which should be supported by wisdom and metaphysical sources.

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