

Perspectives of Mahayana Buddhism on the Destruction of Nature: Evaluating the Value of Nature

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Abstract

Today, human activity has grown to such a large scale that scientists have differentiated the time-period as the “Anthropocene” in Earth’s history. With the continued expansion of human activity, environmental problems have become more and more severe. The degradation of nature is the largest problem for human beings. More than half a century of environmental problems also have continued, and during the time, large research funds have been consumed. As a result, a plethora of research papers have been produced. However, in spite of this productivity, why have the problems not been resolved? Further, why have the problems increased in scale and diversity? Many scientists have come to accept that nature is very peculiar and difficult to comprehend due to its almost infinite matrix of complexity and interactions. However, even if we make progress in understanding nature, stopping the destruction will be difficult. Humanity requires a fundamental change to resolve the growing issue.

In this study, I argue that a scientific evaluation of the environment is not sufficient. In other words, we cannot evaluate the value of nature simply from the perspective of resources and scientific inquiry. Rather, we require an understanding and inquiry into the underlying value of nature from a philosophical perspective. This study aims to describe the importance of Tsunesaburo Makiguchi’s perspective and Buddhist thoughts for evaluating nature. The Makiguchi perspective of the environment holds that nature has a spiritual value which cultivates the mind through the relationship between human beings and nature as outlined in the *Jinsei-Chirigaku* [*Geography of Human Life*] (1903). In Mahayana Buddhism, especially from the Buddhist doctrines of “the three realms of existence (*san-seken*)” and “the non-duality of life and its environment (*e-sho-funi*),” the values of nature are positively evaluated by the natural view that nature not only has comparable values with human beings, but also shares in the destiny of humans as

part of the community. Through a combination of these perspectives, human beings can create an awareness and mission towards responsibility and sustainable attitudes towards the environment.

1. Introduction

HUMAN activity now affects vast places on the planet Earth, and as a result, environmental problems are becoming an extremely complex problem affecting the survival of mankind. Environmental problems have expanded from localized problems, like the former pollution problems in Japan, to global problems like global warming. In the case of global environmental problems, resolving the issues is extremely difficult except for a few problems such as depletion of the ozone layer by Freon. Further, global problems are not only expanding to various regions on a global scale, but are also diversifying. Among them, the systematic degradation of nature is the biggest problem, e.g., direct degradation by human beings such as deforestation and overfishing and destruction of wildlife, and indirect degradation such as ocean acidification and ecosystem deterioration caused by CO₂ increasing and global warming. In addition, there are also problems associated with artificial chemical substances such as agricultural chemicals and plastics that bioaccumulate and affect chemical pathways into marine organisms. The degradation of nature by human beings is so rampant and globally expansive that some are suggesting the world is now entering the sixth mass-extinction of life in Earth's history.

More than half a century of cumulative environmental problems has continued, and during that time, large research funds have been consumed. As a result, a plethora of research papers have been produced. However, in spite of this productivity, why have the problems not been resolved? Further, why have the problems increased in scale and diversity? There may be problems in our approach to understanding natural science and the direction for the development of science. Also, humanity is likely underestimating the value of nature, or not comprehending its true value, which leads to the degradation of nature unconsciously. Therefore, in this paper I would like to examine the value of nature towards resolution of the environmental problems we are faced with today.

2. Expanding Human Activity

In recent years, two concepts have emerged that implicate the

large-scale affects of human activities on Earth. One is the proposal of the concept “Anthropocene”¹ by the International Commission on Stratigraphy (ICS), and the other is the concept “Humanosphere”² which implicates the effects of human activity on Earth on a cosmic scale.

Human activity has gradually increased in its scale, and is now affecting the Earth on a planetary scale. In spite of being only one species amongst some millions, human beings are evolving into an organism that is capable of affecting the entire planet. The most symbolic proposal that represents this is the concept of the “Anthropocene” as a new geological age. Geological ages are classified by events that characterize eras in the geo-strata, usually associated with changes in the biota. Among them, the newest era is the Quaternary era (2.58 million years ago–present) that symbolizes the emergence of humanity. The Quaternary era is divided into Pleistocene (2.58 million–11,700 years ago) and Holocene (11,700 years ago–present). The Pleistocene is characterized by the glacial era, and is a harsh era where primitive man, such as the Peking Man and current human beings (*Homo sapiens*) appeared. The Holocene is defined as the era when the ice sheets disappeared on the Eurasian continent. The proposal of the “Anthropocene” suggests the addition of a new division to the classification. The new addition symbolizes that we have entered an era in which human beings have an even greater influence on the global environment and climate.

What are the characteristics of the Anthropocene? Material that is artificial and hard to break, for example those made of concrete, asphalt, and plastic, will remain in geological formations. Alternatively, metals of aluminum or iron have been brought to the surface of the earth by digging out large quantities from underground. Further, there are other toxic compounds that human beings have synthesized for the first time on Earth, such as agricultural chemicals, e.g., PCBs, dioxins, etc. These compounds will also remain to some extent in geological formations. On the other hand, gases such as carbon dioxide and artificial Freon released into the atmosphere will also be preserved as gas bubbles in Antarctica and Greenland ice sheets.

In addition to the above, other changes in the biota may occur in the future. Changes in the biota are caused by the extinction of living organisms due to climate change, crustal deformation, large meteorite episodes, etc., followed by the emergence of other living organisms. Recent studies suggest the sixth extinction has begun due to the influence of chemical substances, such as agricultural chemicals, overfishing, deforestation, and land development by human beings. Further, as warmer climate zones move to high-latitude areas due to global

warming induced by human activity, the biota will also be forced to migrate. Or, living organisms incapable of acclimating to climate change may perish. As a result, it is inevitable that the biota in each region must change.

Human activities engraved in the strata, on the other hand, can also be confirmed from outer space. The ability to observe these changes from space suggests another concept referred to as the “Humanosphere” which can be observed on a cosmic scale by light and radio waves emitted from the earth. Artificial light that illuminates the world at night includes not only the stray light of big cities, but also the illumination of slash-and-burn agriculture and fire on boats used to lure fish at night. These are visible wavelengths of light, but there are also invisible wavelengths such as radio, television and mobile phones that cannot be seen by humans. In particular, radio waves are constantly emitted from Earth toward the universe, and since radio technology has been developed for more than 100 years, these radio waves may have already travelled to over 100 light years from the planet. As a result, the existence of humans as intelligent life organisms in the universe might be confirmed somewhere in outer space. It is surprising that the activity of one living organism is so prolific as to be engraved on the stratum, and it is even more astonishing that it can be confirmed from outer space.

3. What is the Problem?

As mentioned above, it is extremely important that the activity of only one species of living organisms has become large enough to change the state of the earth. Unfortunately, the direction of human activity is leaning towards the degradation of Earth. On the other hand, if human beings have the power to degrade Earth, it is also possible for humanity to lead Earth in a positive direction. However, rather than moving towards a solution thus far, the problems are actually expanding. What, then, is determining the direction of human activity? One of the origins of our dilemma is the expansion of human desires. However, since the issue was described elsewhere,³ here I would like to address the issues relating to how human beings view and value nature.

When considering what constitutes the “Humanosphere,” the characteristics of our view of nature can be grasped. The major characteristics can be assumed to have been created by human beings. From an ecological standpoint, human activities that alter the environment can be defined as an “environmental reaction” by human beings. In other words, a great feature of the human species is that we have the ability to

conform to the environment or ecosystem (environmental reaction) on a large scale compared to other living organisms. Further, the modifications that human beings have been making in the “Humanosphere” consists of components that we can understand through science, and can be manipulated and controlled by technology. Moreover, in the world based on science and technology, nature is regarded as a means and resource only. In that sense, constructing the “Humanosphere” is to create a world which is convenient for humans, and which can be comprehended through science and technology. Aspects that cannot be created or controlled by science and technology, so to speak, can be considered inconvenient for human beings or science, and might gradually be excluded.

Plant ecologist Miyawaki (1970)⁴ pointed out that, unfortunately, it is difficult for us to measure quantitatively the necessity of plants in nature, and the direct and indirect damage to the spirit and physical body of human beings when human life is isolated from plants; but, this assumption is not considered safe for the simple reason that it cannot be expressed quantitatively. Rather, because it has a qualitative effect on human beings, it is essentially related to life. Although this is ecologically well-known, plants are the only primary producers that can produce their own food on Earth, and human beings are consumers in ecology who can only live by eating what the plants produce. However, it is extremely difficult to scientifically and quantitatively evaluate the needs of plants as primary producers. Furthermore, despite being essential to the survival of human beings, it is further difficult to evaluate the physical and cognitive impacts on human beings when plants are lost. He, therefore, also pointed out “We must understand the invisible, qualitative and indirect relationships between humans and plants correctly,”⁵ in order for human beings to survive and live healthily.

The stronger the scientific view, the more the assessment of nature becomes biased toward evaluations from a scientific point of view. This is very important because there is the potential of losing sight of the really important aspects of nature. Therefore, living organisms in nature may be lost without properly grasping the value of nature. In this example, we will not be able to recognize the true value of living organisms, and it will be almost impossible to know the direct and indirect effects caused by their loss. The problem lies in trying to infer the value of nature from only one perspective of human beings such as that of science. In other words, the vantage of science is biased towards the physical aspect only, and fails to quantify the non-physical, cognitive attributes of nature.

Tsuneshaburo Makiguchi, the founder of Soka Kyoiku Gakkai (the forerunner of Soka Gakkai), pointed out more than 100 years ago the importance of nature that cannot be quantified. Makiguchi (1903) in *Jinsei-Chirigaku* [*The Geography of Human Life*]⁶ specifically addresses the “invisible” relationships between humans and plants, as suggested by Miyawaki, using the concept of “*Chi-Jin-Soukan* (in Japanese)” or the relations between geographic features and human activities. First, Makiguchi divides human relationships with nature into physical and cognitive ones. Physical relationships include both the modification of nature by humans, and the reciprocal physical influence of nature to humans. The relationship corresponds to both an “environmental reaction” and an “environmental action” from an ecological viewpoint. On the other hand, the cognitive, or non-physical aspects include eight relationships. The cognitive relationships are comprised of perceptual, usable, scientific, aesthetic, moral, sympathetic, public, and religious. Makiguchi refers to the five relationships of perceptual, usable, scientific, aesthetic, and moral as the “intellectual relationships” because these five reflect knowledge gained through experience and confrontation with the environment.⁷ “Intellectual relationships” are capable of broadly comprehending nature relative to scientific inquiry because they involve the aesthetic and moral relationships with nature. On the other hand, sympathetic, public, and religious relationships, which Makiguchi calls “sympathetic relationships,” integrates the self with the environment, and sees the self as a part of the environment which cultivates emotional relations with the environment.⁸ Further, he gives concrete examples of “sympathetic relationships”; for example, regarding mountains, plants and animals, Makiguchi states, “Mountains are like heavenly masters because they calm human feelings and enlighten people’s minds ... mountains that are different from the self become part of the world just as the self. And, the relationship becomes part of a sentient being. ... As a result, I become one with the mountains, and I will share its pain. In addition, my mind experiences the destiny the mountain receives.”⁹ Further, “Plants not only stimulate my aesthetic sensation but also calm my own ferociousness. And, plants ferment my poetic sentiment, and as a result, cultivate my heart.”¹⁰ Lastly, “Animals are submissive companions for myself and become comforting. My heart will be cultivated by various kinds of animals related to my life.”¹¹ Such cognitive relationships with mountains, plants and animals in nature are the spiritual values of nature to human beings, and such values are never revealed from scientific inquiry. Thus, the comprehensive value of nature cannot be evaluated by science alone.

4. Buddhist Perspective

How can the value of nature be examined from the viewpoint of Buddhism? “Three thousand realms in a single moment of life” proposed by the Chinese Buddhist priest, T’ien-t’ai (538–597) in his *Maha-shikan* [*Great Concentration and Insight*], includes the “three realms of existence.”¹² The concept of the three realms of existence is comprised of three different standpoints: the first is a “realm of the five components,” which are form, perception, conception, volition, and consciousness; the second is a “realm of living beings,” which is the individual living entity formed by the temporary union of the five components; the third is a “realm of the environment,” which is the place where the living entity dwells. If the realm of living being is a human being, the realm of the environment is the human environment. Regarding the concept of the realm of the five components, form corresponds to the physical aspect of life, and the other four components correspond to the spiritual aspects. Since the realm of living beings like human life is temporally unified with the realm of the five components, all of the components of humans are apparent. However, in the case of the non-living aspects like the environment, form is apparent but the other aspects are latent. If non-human living entities are included in the realm of the environment, then the realm of five components could include not only physical form, but also spiritual aspects. In the three thousand realms in a single moment of life, the most important matter is that a single moment of life (a life) becomes not only a living being, like a human being, but also simultaneously its environment, like nature.

On the other hand, “ten one-nesses” are explained in *Hokke-gengi-shakusen* [*The Annotations on “The Profound Meaning of the Lotus Sutra”*] by the Chinese Buddhist priest, Miao-lo (711–782), and the sixth is the “non-duality of life and its environment (*esho-funi*).”¹³ The Japanese term “*esho-funi*” means that both “*e-ho*” and “*sho-ho*” are “non-duality (*funi*),” where “*sho-ho*” means living beings are the subject, and “*e-ho*” is its environment. And, “*funi*” means “not two,” indicating the oneness or non-duality, that is, two (in phenomena) but not two (in essence). Then, why are both non-duality? Since the doctrine of “life and its environment (*e-sho*) exist in one-mind (one life)” is expressed in *The Annotations on “The Profound Meaning of the Lotus Sutra”*, both belong to the one mind. In other words, one-mind appears in both a life (*e-ho*) and its environment (*sho-ho*), because “*ho*” in “*sho-ho*” and “*e-ho*” in Japanese means a reward, or an effect of karma. Therefore, the effects of karma appear in both the subjective oneself and

in one's objective environment, because life and its environment are two integral aspects of an individual's life. In that sense, this equates exactly to the same meaning as "the three realms of existence." On the other hand, from the viewpoint of the karma principle in Buddhism, it is also possible to regard the same as a manifestation of karma seeds imprinted in the "Alaya consciousness." It is described in the text of *Abidatsuma-junshori-ron* [*Treatise on Accordance with the Correct Doctrine*] by Hsuantsang (Genjo) that "mountains, rivers, ground and so on are born from 'common karma (*gugo*)', and sentient beings are born from 'individual karma (*fu-gugo*)'."¹⁴ Therefore, this means that each sentient being is formed by "individual karma," and its common environment is formed by "common karma." The Japanese Buddhist priest Nichiren describes the relation between life (*sho-ho*) and its environment (*e-ho*) by using an easy-to-understand analogy, "The ten directions are the 'environment [*e-ho*]' and living beings are 'life [*sho-ho*].' To illustrate, environment [*e-ho*] is like the shadow, and life [*sho-ho*], the body. Without the body, no shadow can exist, and without life [*sho-ho*], no environment [*e-ho*]. In the same way, life [*sho-ho*] is shaped by its environment [*e-ho*]."¹⁵

What are the characteristics and viewpoint of nature in Buddhism? As described "without life [*sho-ho*], no environment [*e-ho*]. In the same way, life [*sho-ho*] is shaped by its environment [*e-ho*]," this expresses that the environment is manifested only when a subject is manifested. Further, the subject is made by its environment (e.g., foods), which also expresses a position of consumers in ecology. The recognition is scientifically correct, and it explains that humans can exist only through dependence on nature. In that sense, it can be said that Mahayana Buddhism stands in the position of nature-centrism.

As described, "environment [*e-ho*] is like the shadow, and life [*sho-ho*], the body," the relationship between the subject and the environment is regarded as the relationship between "body" and "shadow." This means that it is impossible to correctly recognize living beings by separating them from their environment. This principle in practice is exactly what Makiguchi suggests as the "sympathetic relationships," or "to integrate the self with the environment and to see the self as a part of the environment." From another point of view, if the subject is a living entity, the environment for each one can be set up separately from each other. Therefore, this viewpoint also represents a very contemporary environmental view that the natural world contains multilayered and complex environments for each living entity.

Furthermore, there is a unique perspective of Buddhism common to

the “three realms of existence”, “the non-duality of life and its environment” and “common karma and individual karma.” It is that one mind (one life or karma seeds) originally appears in both the subject and its environment. As a result, the environment will have a comparable value with human beings. In Buddhism, if a life as a subject has the Buddha-nature and attains Buddhahood, the environment is also naturally the object that has Buddha-nature and attains Buddhahood. The concept is expressed as, “even plants, mountains and rivers have Buddha-nature” in Chinese and Japanese Buddhism. In other words, the concept suggests that not only do humans and animals have Buddha-nature, but also the non-living things such as plants, mountains and rivers, and all existences can attain Buddhahood. This concept gives nature and human beings the utmost equal value, and is the highest evaluation of nature in Buddhism.

Based on the above, the evaluation of value to nature in Buddhism includes not only evaluations derived from scientific recognition, and evaluations derived from sympathetic relationships as a function of cultivating the heart by Makiguchi, but also a unique evaluation that the environment has a comparable value with human beings.

5. Conclusion

Human beings have expanded human activities to the point of being engraved into the strata as suggested in the proposal of the “Anthropocene,” and, on the other hand, have also created the “Humanosphere” that can be seen from outer space. This suggests that human activity has become large enough to influence the physical state of the earth. If so, the evaluation of the value of nature affecting the trend of human activities becomes extremely important. However, the “Humanosphere” created like kingdoms for human beings are composed only of physical materials evaluated by scientific points of view. Thus, the value of nature has gradually become biased only as a valuable resource. As a result, in spite of being the foundation for human survival, nature and living organisms that are incorrectly evaluated are destined to be lost. Moreover, there is little chance of recovery of nature once it is destroyed. This is partly attributable to the value of nature that is not correctly evaluated, that is, underestimation of the true value of nature.

Makiguchi (1903) notes that the relationship of human beings with nature consists of both the physical and spiritual relationships. Furthermore, the spiritual relationships include not only intellectual relationships, such as the scientific relationships, but also more aggressive relationships such as sympathetic relationships that integrate the

self with the environment, and view the self as a part of the environment. He also points out that it is possible to have spiritual value to cultivate minds through a sympathetic relationship with nature. This viewpoint by Makiguchi could connect directly to a Buddhist view of nature. In Mahayana Buddhism, especially from the Buddhist doctrines of “the three realms of existence (*san-seken*)” and “the non-duality of life and its environment (*e-sho-funi*),” the values of nature are positively evaluated by this viewpoint because nature has comparable values with human beings themselves.

As a result, the following conclusions are drawn; human beings and nature share the same destiny, and the destruction of nature is nothing less than the destruction of humans themselves; and since Mahayana Buddhism is nature-centric, the sustainability of human society will be preserved only through the preservation of nature. Furthermore, human beings must be responsible for what type of Earth is to be created and preserved. Although these conclusions are basically similar to the principles for solving environmental problems that SGI (Soka Gakkai International) President Ikeda derived from the environmental view in Buddhism,¹⁶ human beings should lead lives towards truly solving environmental problems based on these principles.

Notes

¹ Crutzen, P. J. and Stoermer, E. F. (2000), “The ‘Anthropocene’,” *The International Geosphere-Biosphere Programme (IGBP) Newsletter*, 41, pp. 17–18.

² T. Matsui (2007), *Chikyu-Shisutemu-no-Hokai* (in Japanese) [*Collapse of the Earth System*], Shinchosha, Tokyo.

³ S. Yamamoto (2009), “How does Buddhism Contribute to the Environmental Problems?” *The Journal of Oriental Studies*, vol. 19, pp. 71–80. S. Yamamoto (1998), “Contribution of Buddhism to Environmental Thoughts,” *The Journal of Oriental Studies*, vol. 8, pp. 144–173.

⁴ A. Miyawaki (1970/73), *Shokubutsu-to-Ningen* (in Japanese) [*Plants and Human Beings*], Japan Broadcasting Publishing (Nippon Hoso Shuppan Kyokai), Tokyo, p. 18.

⁵ *Ibid.*, p. 228.

⁶ T. Makiguchi (1903), *Jinsei-Chirigaku* (in Japanese) [*The Geography of Human Life*], Cited references (Seikyo Bunko, vol. 1, 3) were published in 1971, 1972 by Seikyo Shimbun-sha.

⁷ *Ibid.*, vol. 1, p. 54.

⁸ *Ibid.*, vol. 1, p. 54.

⁹ *Ibid.*, vol. 1, p. 215.

¹⁰ *Ibid.*, vol. 3, p. 184.

¹¹ *Ibid.*, vol. 3, p. 262.

¹² “Three realms of existence” is explained in *Daichido-ron* (in Japanese) [*Treatise on the Great Perfection of Wisdom*], vol. 70, by Nagarjuna (c. 150–250), *Taisho-shinshu-daizo-kyo* (1962), eds. Takakusu J. and Watanabe K., vol. 25, p. 546, first edition (1926).

reprinted (1962), Daizo-Shuppan, Tokyo. “Three thousand realms in a single moment of life” is explained in *Maka-shikan* (in Japanese) [*Great Concentration and Insight*], vol. 5, by T’ien-t’ai.

¹³ “Non-duality of life and its environment” is explained in *Hokke-gengi-shakusen* (in Japanese) [*The Annotations on “The Profound Meaning of the Lotus Sutra”*], *Taisho-shinshu-daizo-kyo* (1962), vol. 33, p. 919.

¹⁴ *Abidatsuma-junshori-ron* (in Japanese) [*Treatise on Accordance with the Correct Doctrine*], vol. 33, trans. by Hsuantsang (Genjo), *Taisho-shinshu-daizo-kyo* (1962), vol. 29, p. 529.

¹⁵ Nichiren, “On Omens” in *The Writings of Nichiren Daishonin* (1999), vol. 1, Soka Gakkai, Tokyo, p. 644.

¹⁶ The contribution text “Chikyu-kankyo-hozen-ni-mukete (Towards conservation of the global environment)” by Daisaku Ikeda (April 17, 1992, Seikyo Shimbun) was published at the pre-UNCED (United Nations Conference on Environment and Development) Consultative Conference in Taplow Court, England. In the article, Ikeda derived the following five principles for solving the environmental problems from the viewpoint of Buddhism: (1) Human beings and the environment share the same destiny; (2) Human beings cannot survive unless supported by a harmonious and coexistent system with the natural ecosystem; (3) The human environment of culture and society should be created based on the natural ecosystem and should be developed in harmony with the law of great nature; (4) Human beings should become guardians for the dignity of nature, and be coordinators for bringing harmony to the global ecosystem; (5) Human beings have the mission of creating value on a global scale.

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