



Nature as an arena for the quality of life: psycho-spiritual values—the next main focus in nature conservation?

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Summary. The purpose of this article is to discuss the concept of the psycho-spiritual values of nature, to call for increased research and concern, and to address these values as important among the ‘third generation’ of environmental problems. The loss of biodiversity and the quality of nature harms the basic psychological interests of man: nature contains beauty and wonders, offers a variety of experiences and challenges, acts as a mental anchor, generates insight and wisdom, and represents a part of the identity of every country. To preserve the quality of nature for the benefit of the human mind and spirit, challenges psychologists, biologists, land-use planners and politicians. ‘Nature as an arena for the quality of life’ is a topic of utmost concern, for it will impact on future generations.

Introduction

Nature is not only a source of food or other products, or an arena for science, to many it also adds substance to the quality of their lives. Nature contains beauty and wonders, offers a variety of experiences and challenges, presents an astonishing diversity of life forms, generates insight and wisdom, and represents a part of the identity of every country. These values are often gathered under the term ‘psycho-spiritual values’ (Callicott, 1997).

The purpose of this article is to discuss the concept of the psycho-spiritual values of nature, to call for priorities, and to address these values as important among the ‘third generation’ of environmental problems.

A change of focus

The international focus on environmental problems has undergone considerable change during recent decades. In the 1960s, the focus was mainly on pollution problems. Pure water, air and soil could no longer be taken for granted, and biocides and heavy metals started to accumulate in the food chains. A classic book from this decade was ‘*Silent Spring*’ (Carson, 1962). These so-called ‘first generation’ environmental problems became the topic of the first international environmental conference, the United Nations Conference on the Human Environment in Stockholm, 1972. The pollution challenge was thereafter followed up by a number of conventions and measures. However, other environmental problems were growing and gradually came into focus. These so-called ‘second generation’ environmental problems (Adede, 1995) represented a number of new challenges, which included global warming and climatic instability, depletion of the stratospheric ozone, desertification, and an accelerating loss of species and habitats, especially in tropical forests. These new challenges resulted in a ‘new breed’ of treaties, as

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well as the appearance of new concepts and principles, *e.g.* sustainable development, the precautionary principle, and biodiversity (Adede, 1995). Armed with new principles and concepts, the international community met for the second time in Rio de Janeiro in 1992, for the United Nations Conference on Environment and Development (UNCED). The world agreed upon two important arenas of concern: biodiversity and climatic change.

Both the Stockholm and Rio conferences demonstrated that there is a considerable time-lag between the appearance of a global environmental problem, and international agreement and action. Firstly, problems have to be identified and understood. Secondly, common conceptual framework is necessary. However, the development of concepts and principles is often a slow process. Thirdly, political implementation in the form of conventions and national strategies takes time, and years may pass from ratification of conventions until improvements can be observed in nature. The total time lag may result in irreversible loss of environmental qualities and values. It may therefore be fruitful to ask: can the environmental issues which will come into focus during the next twenty years be forseen? Will the 'third generation' have to consider quite new topics? It is suggested that one of the environmental topics which is rapidly growing in concern and scientific evidence, is the value of nature for the human mind and the quality of life.

Psycho-spiritual values of nature: viewpoints from the literature

In his overview of the values of biodiversity, Callicott (1997) first distinguished between instrumental or utilitarian values, as opposed to intrinsic or inherent values. Four categories of the instrumental value of biodiversity were considered: 1) Goods (food, fuel, fibre, medicine, etc.), 2) Ecological services (pollination, recycling, nitrogen fixation, homeostatic regulation, etc.), 3) Information (genetic engineering, applied biology, pure science, etc.), and 4) Psycho-spiritual (aesthetic beauty, religious awe, scientific knowledge, etc.).

Leopold (1953) hoped that through science people would acquire 'a refined taste in natural objects'. To be moved by the beauty of organisms and whole, healthy ecosystems, to experience a sense of wonder and awe in the face of nature's inexhaustible marvels, is to become a better person, according to Norton (1987). The evolutionary biologist Wilson (1984) finds a special wonder, awe and mystery in nature, which he calls 'biophilia'. He assumes that mankind has become mentally influenced by the long prehistoric epoches in close contact with nature. Other species represent an important element of the matrix in which the human mind originated. His 'biophilia' concept indicates that man has a basic interest in, and is fascinated by other life forms. Biodiversity may thus be regarded as an important basis for the human spirit. In his book *The*



Figure 1. E.O. Wilson's 'biophilia' concept indicates that man has a basic interest in, and is fascinated by other life forms. Larva of the Privet Hawk, *Sphinx ligustri*.

Diversity of Life, Wilson (1992) states: “In the United States and Canada more people visit zoos and aquariums than attend all professional athletic events combined. They crowd the national parks to view natural landscapes, looking from the tops of prominences out across rugged terrain for glimpses of tumbling water and animals living free. They travel long distances to stroll along the seashore, for reasons they can’t put into words”.

Scientists have now started to put the experience of nature into words. In the USA, Kaplan and Kaplan (1989) summed up twenty years of psychological studies in their book *The Experience of Nature. A Psychological Perspective*. They found, as has often been suggested on a non-scientific basis, that contact with nature or elements of nature, from trees and parks in towns to nearby nature or remote wilderness areas, had a great positive effect on the human mind and life quality. They concluded that contact with nature had a high recreational value for mentally fatigued people: Nature offers us a soft fascination, at the same time as silence and distance from the sources of stress recharges our attention. It is our ‘di-

rected attention’ that is recharged, the attention that requires a good deal of effort, and which modern man often uses heavily in his daily work. Contact with nature clears the mind, and often makes humans reflect over the real values of life. Even the knowledge that recreational areas exist nearby, has a positive mental value for many people. A main conclusion of their work was that: ‘People feel more satisfied with their homes, with their jobs, and with their lives when they have sufficient access to nature in the urban environment’.

Like Wilson (1984), Kaplan and Kaplan (1989) speculated on whether the human’s fascination with nature might be a product of evolution, since nature is the original ‘home’. Hunting, fishing, collecting berries or mushrooms, exploring new landscapes, and learning about the life of other organisms, appeal strongly to the human race. The human body and senses represent the perfect hunter and collector, a state of life that has dominated human history.

Uddenberg (1995) found that modern Swedes consider nature as being very valuable for recre-



Figure 2. Contact with nature-and the silence it offers-clears the mind, and may make people reflect over the real values of life.



Figure 3. Exploring new landscapes appeals strongly to people. Hardangerjøkulen glacier, Norway. (Photo courtesy: Svein Grønvold).

ational purposes. In a large study covering 1000 people, 94 percent agreed with the following statement: “Strolling around in forest and fields makes me relaxed and harmonic”, while only 8 percent agreed with the statement: “I have no need for contact with nature”.

Nature as an arena for the quality of life

To many, perhaps most people, it is too narrow to relate the psycho-spiritual values of nature only to ‘biodiversity’. The experiences in nature include the shifting of seasons or the light during the day, the mental atmospheres and moods created by different weather conditions, the excitement and challenges of exploring unknown landscapes, or nature as a place for social activities. It is possible to enjoy the silence and freedom, the expectations of something which is being sought, or the beauty of flowers and landscapes. The gigantic forces of a storm or a waterfall hold a strong fascination. Pieces of virgin nature are often highly appreciated ‘nature documents’, showing the natural products of evolution and geological processes. Fossils are a reminder of the history of life, and geological strata relate the vast passage of time. Nature has always fascinated man, and all religions have special attitudes towards nature. This non-exhaustive list illustrates the great span of psycho-spiritual values con-

nected to nature. ‘Nature as an arena for the quality of life’ may, therefore, be a fruitful expression. Although small elements of nature like trees, parks or gardens may be valuable in daily life, the expression signals the importance of preserving whole landscapes, and includes the value of exploring them.

An erosion of mental values

Many countries have lost their last traces of virgin nature. All over the world, nature areas are shrinking and being fragmented, with a reduction in biodiversity and quality as a result. Humankind’s ‘arena for life quality’ is being strongly eroded. An important question, therefore, is whether it is possible to identify the psycho-spiritual values that are under erosion. A grouping of some central values is attempted below. The list, of course, could be much enlarged, but the purpose is to show that erosion of the quality of nature touches some basic psychological interests of man.

The value of wondering

Man loves to be fascinated, to observe unexpected phenomena and processes, and to wonder about possible explanations. Nature offers a great number of wonders, from large-scale scenery with thunder and lightning, to the emergence of a butterfly from the pupa. To someone who has seen how a spider systematically constructs its intricate web, a spider is no longer an indifferent creature. A collection of unexplained wonders is a valuable mental harvest from a visit in nature.

The value of aesthetics

In Uddenberg’s (1995) study in Sweden, a majority of the people stressed the value of beauty in nature. Long-term American studies (Kaplan and Kaplan, 1989) also concluded that beauty was considered an important element in nature. All over the world, much art is inspired by nature. Beauty and aesthetics have a high ranking in all cultures, and a global reduction in the quality of

nature means that an important, traditional source for human art and culture is shrinking.

The value of exploration

Understanding and exploring are basic human needs (Kaplan and Kaplan, 1989). The human likes to explore unknown landscapes, to discover what is beyond the next bend in the river, or behind the next hill. The hidden information in nature is a challenge. There is an attraction to what Kaplan and Kaplan (1989) named 'mystery' in nature. They concluded that exploration is an important element in accumulating experience. Humans may also like to test out their physical abilities, and appreciate that their bodies work adequately. Many people combine these experiences with hunting and fishing, and even without a catch, they may consider the trip most successful.

The value of nature as a 'mental anchor'

Everyone needs some 'anchors' in their life, firm points to return to when they are shaken or fatigued by a stressful daily routine or during life crises. Many people have 'special spots' that they feel very possessive about and consider to be their own (Kaplan and Kaplan, 1989). Such spots may be a single large tree, a favourite childhood place with good memories, or a wilderness area with undisturbed nature. Individuals may not become aware of such attachments until a threat arises, but a loss of the place may create a reaction of sorrow. Especially valuable are favourite areas which are likely to remain undestroyed. For instance, a protected wilderness area may represent something stable and unchangeable, something safe to which it is possible to return and be recharged.

The value of nature to maintain identity

The disappearance of virgin nature implies that a country loses some of its identity. For instance, with very few intact watercourses, and almost no virgin forest left, a country's character will be



Figure 4. In nature, *mentally fatigued* persons can recharge their *directed attention*, and enjoy nature's *soft fascination*. In that respect, a fishing trip even without a catch may be considered successful. (Photo courtesy: Svein Grønvold).

strongly changed. Foreigners and tourists often see this loss of national identity clearer than the inhabitants themselves. On a global scale, the Earth's character would change dramatically if, for instance, the virgin character of the Amazon area was destroyed. Most persons to visit the planet Mars, would be disappointed if the original 'nature' of the planet had been completely changed by the inhabitants. Humans would be eager to show a visiting Martian the last of the Earth's wildernesses and the original identity and character of the Earth. Conservation of virgin nature is a matter of preserving the identity of the Earth, a value for human minds.

A need for concepts and priorities

The values listed above may be considered as 'third generation'. It is hoped that the value of the quality of nature for the human mind can be brought into focus the next time the international society meets to discuss global environmental challenges. If the human race fails to prepare this topic in time, nature's door to beauty, experience and insight may start to close.

How can these values be promoted? First, an improved framework of concepts is required. Values without names are politically dead, and atti-



Figure 5. Psycho-spiritual values of nature include the effects of changing seasons. Many people have ‘special spots’ that they feel very possessive about and consider to be their very own. An awareness of such attachments may not be recognised until a threat arises, but a loss may create a reaction of sorrow.

tudes without words have no force (Hågvar, 1994). The list of eroding values referred to above may be a starting point. Secondly, more research about basic mental values in human life, and how nature may fulfill these is necessary. Paradoxically, the present level of knowledge about psychological needs of the human species is limited. Thirdly, although as yet not fully developed or understood, the topic should be put on the political agenda, and should be continually fed with growing scientific documentation.

There is a great danger that the human race may agree upon the values of nature too late. And there is a danger that a passive attitude in this field may result in the combination of ‘less nature-less concern’, a self-destructive process. People lacking the possibilities of experiencing the variety, wonder and pleasures of nature may lack both the understanding and motivation that

is necessary in order to fight for biodiversity and the quality of nature.

Not only biodiversity as such is threatened, but also important sources of man’s quality of life. The psycho-spiritual values of nature probably represent a great potential power. To preserve the quality of nature for the benefit of the human mind and spirit is a joint challenge of both a local and global character. It concerns the immediate environment where people live, as well as last wilderness areas. It challenges both psychologists, biologists, land-use planners and politicians. Because the loss of nature and species is a globally accelerating process, and has an irreversible character, future generations will be the big losers. ‘Nature as an arena for the quality of life’ will surely be a topic of utmost concern for the unborn generations who follow. Are we willing to represent them?



Figure 6. Because the loss of nature is a globally accelerating process, and has an irreversible character, future generations will be the big losers. Is the human race willing to represent them? Jotunheimen, Norway.

Acknowledgments

The author wishes to thank Olav Hjeljord and Anders Often for critically reading manuscript, and Judith Meadow for improving the English.

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