
ENVIRONMENTAL EDUCATION AND THE NEED FOR ECOLOGICAL AWARENESS

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Abstract: This paper deals with the relations among nature, man and life and in this context it questions the ecologically sustainable development. It looks for a philosophical reconciliation between the claims of physical eschatology that life was created during the cosmic big bang, and the social theory of sustainable development which is anthropocentric in its essence. The disagreement from Kyoto, especially visible at the second conference in Johannesburg, is deepening every day so that the original concept of sustainable development is increasingly moving toward a utopia, while new social theories (first and foremost the theory of the new world order) are taking the upper hand. Sustainable development is more and more understood as a utopia of postmodernism. The ecologization of social consciousness designed at the beginning as a democratic swing towards sustainable development is threatening to grow into a new ideology of postmodern colonialism. Modern scientific and theoretical achievements, development of technology, and political changes on the world's map now question the concept of sustainable development conceived in Stockholm (1972) and pompously announced at the summit of chiefs of states and governments in Rio de Janeiro (1992).

Keywords: Ecological education, sustainable development, ecological phenomenon, pedagogical practice, ecological-pedagogical process.

1. INTRODUCTION

The starting point of eschatological conception is the question what the essence of nature is and what the purpose of a man's life and death are in it. The early concepts started from the perfect harmony of man and nature, from the infinity of life continuing after death, and from the noticed necessity as an ephemeral state of life. Necessity ends with the return of man to nature. In various mythologies this return is marked as life after death, either through the immortality of ideas or through reincarnation in other forms of material life. The Egyptian mythology discovers three levels of life or world: monistic (world creators), dualistic (the world of divine “married” couples), and pluralistic (a variety of deities). The first one is the highest, spiritual, celestial and eternal. The world of souls. For man, it is lost due to Osiris's death, thus he can return to it solely after life on Earth. The ancient Greek mythology also uses eschatology (*eschatos* = ultimate, last, and *logia* = learning, science) to denote the belief into the existence of soul after death. Greek myths abound in stories about life in the underworld and communication of souls in sepulchral world. Jewry, and later Christianity, transformed eschatology into a conception of resurrection after death, last judgment, heaven and hell, upheaval and end of the world. Christianity preaches about the day when all the righteous ones will rise and live infinitely in divine harmony. The man's homeland is paradise where all his needs are satisfied. Notwithstanding the paradise lost, the memory of that state urges him to expiate his sins “in the sweat of his flesh” and to return to the perfect existence. This conception is particularly supported in the Middle Ages although Christianity even today has not abjured “the end of the world” idea where the righteous ones will be rewarded and the evil will be condemned. “The belief in *ma'ād*, literally “return” to God, or what is theologically known as eschatology, is the part of Islamic belief... People live in a world full of injustice, so if someone accepts the Divine Justice it makes it necessary for him to accept the reality of other worlds and posthumous states of the human soul where ultimate justice is found”.¹

2. ENVIRONMENTAL EDUCATION – HISTORY OF THE TERM

According to Činčera (12) the term environmental education was first mentioned in the conference of IUCN5 in 1947. Then it was discussed in Stockholm in 1972 and Belgrade in 1975. The first international conference about environmental education took place in Tbilisi in 1977 where its goals were formulated (Tbilisi Declaration, 1977):

1. to foster clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas;

¹ *Seid Husein Nasr: (2002), “Srce Islama”, Islamska eshatološka učenja, El-Kalem, 2002, Sarajevo*

2. to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment;

3. to create new patterns of behaviour of individuals, groups, and society as a whole towards the environment.

Činčera claims that since that time environmental education has started to play a crucial role in comparison with other school subjects, because it aspired to form and develop not only knowledge, skills and attitudes as other subjects, but also awareness, understanding and competences. So the environmental education has become a key subject, but on the other hand, it has also brought some problems. One of the most significant was that the opinions on understanding of this matter began to differentiate. Činčera points out that later on there were distinguished three basic areas of environmental education: education about the environment (empirical and factual dimension), education in the environment (aesthetic dimension) and education for the environment (ethical dimension).

In English-speaking countries there are some differences between ecological and environmental education. Ecological education is focused on ecology and it is generally defined as the scientific study of the interaction between organisms and their natural environment, whereas environmental education is aimed at environmental science, and could be characterised as the study of the interactions among the physical, chemical and biological components of the environments. It is possible to say that the term environmental is superior to ecological. It was probably the reason why the Ministry of the Environment started to use the term environmental education and it has been implemented to all-important documents. The principles of Environmental education in the Macedonian Republic were formed in and were based on Tbilisi document. Then environmental education became a compulsory crosscurricular subject of the Framework Education Programmes. In 2008 the Ministry of Education published the new amended Methodical Instructions for Environmental Education. In this text they indicate that “ the environmental education within the bounds of this Methodical Instruction has the same meaning as ecological education ”. This document also brings a new term that has been currently formed – Education for Sustainable Development:

Enables people to develop the knowledge, value and skills to participate in decisions about the way we do things, individually and collectively, locally and globally, that will improve the quality of life now without damaging the planet of the future. (Metodický Pokyn, 2008)

It is remarkable that the education for sustainable development borrows from environmental education, concerning the content and methodology. This document accurately and simply explains the main principles of environmental education, defines useful terms and provides concrete guidelines how to realise environmental education in schools. Environmental education is defined there as “ a set of knowledge, skills and values which leads to the ability to realise practical action and develop the informed interest about the environment ” (Metodický Pokyn, 2008)

3. IMAGES OF ENVIRONMENTAL EDUCATION

It is not easy to identify some basic and united conceptions, goals and principles of the environmental education. All the texts about environmental education are oriented too broad. In fact, environmental education is not one united educational approach. In reality there are more approaches which are usually based on Tbilisi document. Robottom and Harper (qtd. inPalmer 146) distinguished three images of environmental education – positivist, interpretivist and critical.

4. GLOBAL EDUCATION

It is relatively a new approach in pedagogy. It was created at the University of York in the eighties. It has been spread all around the world and its main centres are the Centre for Global Education in York and International Institute for Global Education at the University in Toronto. In the Czech Republic it has been known since 2000, when Pike and Selby’s book was first published. The main populariser is the centre of ecological education SEVER. Pike and Selby (32) define it as an approach that connects the reflection of global issues of the planet Earth (world mindedness), paid centrism (child– centeredness) and system theory (relation among the elements). They stress a fourdimensional model of global education: the issues dimension, the spatial dimension, the temporal dimension and the inner dimension.

In 1994 Pike and Selby (301-303) set out five aims for global education:

- 1) System consciousness - Student should acquire the ability to think in a systems mode, acquire an understanding of the systemic nature of the world and acquire a holistic conception of their capacities and potential
- 2) Perspective consciousness – Student should recognise that they have a worldview that is not universally shared and they should develop receptivity to other perspectives
- 3) Health of planet awareness – Student should acquire awareness and understanding of the global condition and global development and trends; develop the concepts of justice, human rights and responsibilities and they should be able to apply that understanding to the global condition; develop a future orientation in their reflection upon the

health of the planet.

4) Involvement consciousness and preparedness – Student should become aware that the choices they make and actions they take individually and collectively have repercussions for the global present and the global future and they should develop the social and political action skills necessary for becoming effective participants in democratic decision-making at variety of levels

5) Process mindedness – Students should learn that learning and personal development are continuous journeys with no fixed or final destination and learn that new ways of seeing the world is revitalising but risky Global education includes several topics such as environmental issues, health, media, culture differences, peace, equality, poverty, human rights citizenship, justice, economics and it is aimed at development of creativity, imagination, communicative skills, drama-education and other social competences. Global education urges for changing the whole curriculum. From its point of view the school should prepare students for solving the current problems and provide them necessary personal competences. There are many models of global education: Toronto model (University of York), dark green model, system thinking (The Institute for Policy and Social Science), Christian-oriented global education (Church World Service), Adventure in the classroom (project Adventure). They use several methodological techniques such as simulation games, role-playing, discussion, school projects etc.

5. ESCHATOLOGICAL CONCEPT OF FUTURE

The eschatological concept of future is philosophically-mythical and therefore uncritical and utopian. Although real life is going on outside these conceptions, fairy tales reflect upon the state of social awareness and social relations. The choice of human imperfectness (unworthiness of divine existence or “the paradisiacal sin”) as the sole cause of natural necessity influences the formation of institutions and rigorous rules for most people. The conceptual disposition transfused into a legal regulation produced sanctions that were more drastic than the natural ones. Crucified body on the cross, castigation, quartering, guillotine and similar (all these in the name of religious purity) showed that human sanction can be more merciless than natural. On the other hand, earthly pleasures were positive sanctions nicer than those nature itself could have offered. “Real fantasies” enabled small groups of people to transfer natural necessities, even if just for a certain period of time, onto the shoulders of wide masses of people. Slaves, with rare exceptions, were not able to breed; they were not even treated as human beings. Equality of people in the eyes of God did not eliminate inequality on Earth; it only legitimized the new institutions and the division of moral rules in the preparations for the world of the righteous ones. Where a moral rule could not be realized through customs, it was turned into a written rule. The following question has stayed open until today: Do institutions precede the conception of future or they are created out of available futuristic concepts? Engels’s letter to Werner Sombart says: “According to Marx, all history till present day – when it is about major events – happened unconsciously, i.e. those events and their consequences did not depend on human will”.² Such point of view is partially also represented in Christian teachings. The man did not create the world, but it was given to him by God to manage it. Hence his role is not to possess it but to rule it by the laws of God. Malinowski and Levy Strauss claimed the opposite. People have always established functional relations and accepted them without feeling great obligation. Consequently, man has always been endowed with consciousness.

6. LIFE AND NATURE – VALUE

The totality of the visible and invisible world in man’s consciousness exists as nature. The complexity of nature, especially phenomena happening in man’s immediate and farther surrounding has always occupied his attention and thinking. From animism to monotheism, from practices to philosophy, from empirical to the most complex scientific-theoretical discoveries and interpretations, human consciousness was constantly concerned with nature. The ruling human consciousness attributes infinite movement to the state of nature, processualism and changes in its internal structure. Thanks to this, numerous fusions, relations, structures and restructuring inside nature occur, as well as expansion and narrowing of compounds, qualitative transformations of internal relations and the genesis of life. There are also views that nature reflected its own universality onto the internal elements, which enables it to function as a whole.³ Vladimir Gregorievic Karamanov claims that plants have senses and that, if they lost them, there would be no possibility of “transporting and processing information in their own language and memory”.⁴ We should not forget that the French materialist Didro emphasized that even rocks speak but we do not understand

² K. Marx – F. Engels (1979), “Dela”, book 46, p 389, Prosveta, Beograd, 1979.

³ Howard Miller (2006), tried to prove that “some form of cell consciousness must be common for all the living things”, and Clive Baxter in 1966 tried to prove by means of a lie detector that plants reacted to human feelings (Peter Topkins and Christopher Bird: “The secret Life of Plants”, pp 19-33, Red Box leader, Belgrade, 2006.

⁴ Ibid., p 88

it. All this leads to the question whether nature is a value in itself or values originate from nature's movement. If we begin from the earliest man's perceptions until today, human attention was occupied with a specific form of the occurrence of natural processes marked as life. The goal was to penetrate into the very essence of life. Is life given or is it a consequence of some states before life appeared? Although this question is not the subject of this paper, let us mention that basically there are two global perceptions: religious and natural-scientific. The first one interprets that all life in the existent form is *given*, which could induce the Indian writer and spiritual teacher Shril Prabupada to state that life develops out of life.⁵ Having the same motives the Indian chief was able to write the first "ecological letter" to the American President Abraham Lincoln appealing for preservation of the natural environment. However, when the quest for the creator of life began (God, idea) it was unavoidable to involve the question of the meaning of life. It is pointless to respect life, says Kolakowski, because then we would not be able to live without destroying other forms of life. This has no foundation in the religions of biblical provenience as well as the respect for nature as a value in itself.⁶ Natural scientific theories explain the genesis of life in an evolutionary manner with chemical and biological revolutions that could have begun 15 billion years ago; life as appeasement of cosmic stress or as existence, movement and transformation of forms of matter and compounds from lower ones into higher. Therefore, the nature itself is a form of life. It is a material form of expressing a bearable stressful state of movement. What is visible or what is characteristic for our senses and thinking perception. Nature and life are seen as autonomous entities while nature is given a material character and life is given a dynamic form of expressing the material world. In this context we speak about cosmic nature as about nature, and about other nature or natures as about ulterior nature. Ulterior nature has appropriate ulterior stress and possible forms of life. Human nature, analogue to such understanding, could be determined as a concrete material expression and bearable feeling of cosmic stress begot more than billions of years ago, with the emergence of first cells that evolved to the human form of existence. Life as stress has a value. As long as we are able to adapt to it, life will exist as a value for us. Apart from this, even if it keeps producing new natures, without us life becomes a value in itself. Stress is manifested as movement, processing, changes, and nature as phenomena, being or thing. It should not be removed because it would mean that we remove life. If possible, it should be maintained in a bearable state for us by means of technology or by anything else.

7. BETWEEN NATURAL AND SOCIAL LAWS

The harmony of nature is realized through the unity and struggle of the factors opposites of the internal structure. The nature realizes its ideal harmony at the meeting point of confronted poles. By removing from the meeting point harmony tends to turn into disharmony and the existence of opposites by themselves. How concrete natural processes will take place depends on the quality of factors and mutual connections that are built among them, as well as of connections established with some distant realities. The noticed regularities apply until the relationship between reason and result and their inner links are not changed. Change brings in other rules. So, harmony cannot be viewed in totality but in relativity. If we let this out of our sight, nature will show itself to us once as a divine force and another time as wilderness. How are we to discover the driving mechanisms and the forces of movement of natural harmony? Historical practice showed that man did this in two ways: a) by discovering rules that act in nature and communicating with them; b) by analogously transferring or modifying these rules of behavior in the society with the aim to mainly realize social harmony; they are denoted as social laws.

A law is a general rule created as a result of the cause and effect relation factors of the internal entirety and their inner connections. In this sense a law is a general value. A natural law is an objective general value for man. The determination of a law as a general rule understands both a vertical and a horizontal dimension. Vertically, a law is a supreme and irrefutable rule. From the horizontal point of view, a law is a universal form of expression or indication of cause and effect relations of any natural or social process. By determining it as a *form* of expression or indication of cause and effect relations we have it a material mark. Every law is available to human senses, either directly or by means of certain technical aids, and to a logical mind, or through thinking and understanding.⁷ It means

⁵ Shri Shrimad Bactivedanta Swami Prabupada (2002) "Life develops out of life", In Bagavad Gita, among else, it says that a living being is life itself and that it is expressed in various material conditions. So he mentions eight million and four hundred thousand forms of life, pp 17-18, VVZ Weda, Belgrade

⁶ Lesek Kolakowski (1999), "About Respect for Nature", "Gazeta Wyborska", 13-14 February 1999., Poland

⁷ Wilhelm Dilthey (1994), "Foundation of spiritual sciences": "Our actions everywhere presume the understanding of other persons; a great part of human happiness is the result of getting into psychological states of others; the entire philological and historical sciences are based upon the presumption that such understanding of singularity can be raised to objectivity. The historical consciousness built on this enables the modern man to have in himself present the whole past of humankind..." p 94, Prosveta, Belgrade

it has the capacity to simultaneously express and confirm the objective state. Thanks to this, man did not have to invent but to discover natural laws. The existence of laws as a form confirms the consistency of the internal content. The formal character made it possible to discover the causality of cause and effect gradually, and leave their invisibility somewhere for future generations to notice, though out or abstracted from the abundance of relations and factors. The universal character of laws indicates to the conclusion that space and time are not crucial for their expression. Causality is based on the relations between forces, on *quantity* and *quality* of factors and connections of inter-intra phenomena or processes, and not on simple time or space expression. Hence it could be said that a law is a consequence or that what comes out of the continuity of movement and processes to which humans and things in nature are exposed. Accordingly, a natural law has no sanction but the disposition indicates the general rule. Sanction (Lat. Sanction = dedication), a positive (reward) or negative (punishment) exists as a subjective value or value for someone. According to the manner of its expression and action laws are various, which denote the variety of the cause and effect relations and the expressions of life consequences. The most general classification of natural laws done according to the amplitude of the rule application distinguishes general and specific laws. The existence of general and specific values, i.e. laws makes it possible to notice the development of phenomena, to determine and foresee the results.

8. SUSTAINABLE DEVELOPMENT – FOR WHOM?

However we define it, sustainable development is an endeavor or attempt to manipulate nature and life and in that way produce new values or systems of values meant to provide easier “suffering” (adaptation) of man. The shielding of ecologists of different orientations behind the respect for nature, protection of the environment or “deep ecologies” did not essentially abolish anthropocentrism. In the spirit of the Marx’s 11th thesis about Feuerbach (“the philosophers have interpreted the world in various ways...”) the divisions went from those who thought that individual forms of life should be protected to radical ecologists who involved the entire nature at the price of human abandonment of easygoing life. With this we do not advocate a deviation toward ecological theories and various movements. Their merit, if nothing else, enabled the modern man do reasonably reach the need for a natural balance as a factor of his own survival. But, the duality of man and nature has not been prevailed by this. Sustainable development designed in a man’s head is assigned to man. Since man is a natural being and cannot exist outside nature, the concepts of sustainable development are calculated potentially for that natural surrounding which confirms him as a manipulator or, at least, a factor of life and nature. Biodiversity outside the tolerable ecological balance, i.e. survival of man in nature and life is the same as the ulterior nature. It does not reach either feeling, manipulative and adaptive way of existence and it cannot be transferred into a value for man.

The events from the second half of the previous and the beginning of this century showed that the issue of sustainable development was not only scientific and philosophical, but also practical and political. The idea of sustainable development that was conceived in 1972 in Stockholm and promoted in Rio de Janeiro (1992) as a planetary vision, in Kyoto (1997) showed that the scientific warning about the impaired ecological balance and planet overheating did not impinge on the interests of the USA administration. The US has not signed the Kyoto protocol till the present day. Only five years later at the second summit of presidents of states and governments in Johannesburg it became obvious that a planetary agreement was impossible, and the great powers turned to bilateral forms of solving ecological issues. The managing of sustainable development conceived as a dialogue of civilizations ended up in the milieu of political utopianism in a relatively short period of time. The last decade of the previous century turned the attention to the “struggle against communism”, i.e. destruction of socialistic state establishments in the world. The enormous amount of power and mass impoverishment in the name of “human rights” pushed the concept of sustainable development into the background, and in its place put the concept of globalization and establishment of a new world order. The confrontation within a species got the priority in relation to the endfacing of the ecosystem issue. Or maybe a foundation for this could be found in deep ecology, according to which modern humankind is disturbing the natural balance with its excessiveness and overspending of natural resources. Sustainable development must not be anchored only on common sense or be satisfied with the answer to the question who should manage the further development. “Stress” does not always function either mainly by the common sense principle or necessarily has a humanistic character. It gets this meaning from man. Unless it gets the meaning assigned by species, it will become sustainable development for a subspecies or only a part of the human community.

9. INSTEAD OF CONCLUSION, ABOUT THE ECOLOGIZATION OF CONSCIOUSNESS

The conscious endeavor of man not only to solve and overcome current problems of relations with nature and social

relations, but it also futuristically foresee, is as old as man himself. In the name of invasive goals humankind put soldiers into uniforms and in the name of great ideas the consciousness of the entire humanity. History teaches us that any imperialism expanded in order to fall, and that all great ideas ended up as utopias. Unlike all imperial conquests so far, the concept of sustainable development represents a strategy of limiting and withdrawing of social nature in front of planetary nature. The people were to be prepared for that process by the ecologization of social consciousness.

Contemporary events, inertia of the technological process and political practice increasingly indicate that the concept of sustainable development represents the antithesis of the historical development that should be disputed. Postmodernism - yes, but elimination of the bipolar world – no. There is a danger of sustainable development becoming a modern utopia, and ecologization to grow into an ideology or religion of mass movements. It stands naively in relation to the real world, theoretically wide and morally far. It adopts the forms of ecological prophecy without consequences, at least in modern time. Milentijevic and Stavreva-Veselinovska depict the contemporary paradigms but this does not outreach the interests of either the privileged social classes or of ordinary people. It withholds the right to individuality to the first ones and to the latter environmental problems is not a priority. A critique could be sent to the European and American science concerning keeping data in computers which creates unreal, utopian judgments so that it gives politicians with practical spirit the right to act in the name of moral instead of moral acting. Is ecologization being increasingly twisted into religion of postmodernism, new cultural trend, or is it only a transitive solution toward some Orwellian theory? Only time will answer these questions because any prejudgment of the answer would jeopardize the truth.

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