

ECOLOGICAL CULTURE AS THE BASE OF THE SOCIETY HARMONIZATION IN THE SCIENTIFIC PROGRESS ERA

The problem formulation

Unfortunately, a human by improving his own living conditions, creates negative consequences for his living, creates new human-made problems through intensive use of natural resources, produce harmful and even dangerous waste for the environment and society.

Ensuring coherence in interaction human society with such life "improvements" requires appropriate ecological knowledge, new philosophy, which should be based on a thorough understanding and implementation of sustainable human elaborations towards harmonizing relations with nature.

Scientific and technological progress entered our everyday life by improving living conditions (european renovation), increasing the range of clothes and shoes that are not comply with sanitary and hygienic requirements. Large arsenal of household chemicals allegedly intended to improve the working conditions of housewives but its impact on human health is significant and negative.

Food additives, colorings, flavor improvers used in the production of various kinds of sausages and other products, not mention various drinks, perfumes, detergents etc.

Alcoholic drinks and cigarettes became "authoritative" attributes in communication not only among young people.

The ability to efficiently use the results of scientific and technological progress, both at home and directly in the public places requires respective human culture - the ability to use certain items, materials, devices, products within reason, and from some to give up altogether.

Ecological culture is a part of Cultural Science, which in turn is the basis of society spiritual culture.

Recent researches and publications analysis

Ecology as a new philosophy in the relationship between human and nature combines several scientific fields of different relation to nature. This situation is extremely dangerous because primarily concerned with intensive exploiting of natural mineral resources, leading to serious economic losses and social problems [1]. Unfortunately, among total number of ecologists of highest qualifi-

cation is still no unity in solving specific problems. This is understandable, because the changes taking place in society in relation to nature took destructive features and continue the same. Ecologists' task reduces to predict these features and to prevent their emergence [2].

Biosphere synergistic systems are complex and characterized by a fundamental openness and processes irreversibility [8]. In this connection, human interaction with them takes place so that the human action is not something external but includes in the system, each time altering the field of their possible states.

After all, if a person is included in the biosphere as a whole system that self-developing, its activities can respond resonance not only immediate, but also in remote parts of the system and in certain situations call biosphere catastrophic restructuring. Human violent alteration of synergistic processing system, in which he is included, can cause undesirable consequences for the individual. In this case limitations of human activity are inevitable, and they have to be aimed on the selection of only those scripts of world changing, which provided a survival strategies [7].

Engineering human activity is increasingly dealing with not just a technical device or machine that enhance human capabilities, and even not with the system "human - machine", but with the system complex, in which components of a whole are agreed. The technological process associated with the human-machine systems operation, local natural ecosystem (biogeocenosis), in which this process should be implemented and socio-cultural environment that adopts the new technology. The whole complex in its dynamics is presented as a special item that is open in relation to environment and that has the characteristics of self-regulation. It is implemented in an environment which, in turn, acts not as a neutral field of the new technological systems functioning, but as a kind of holistic living organism [2].

Environmental activity is one of the main components of any sphere of human activity: agriculture, manufacturing, transport, military and others. All these activities are reduced to natural or human resources usage and in this way the interference into the biosphere processes take place. In this regard, the object of ecology as the science about the environment, especially now includes research of new relationships between living and non-living components of ecosystems that occur under the influence of natural and anthropogenic factors and significantly affect the functioning of ecosystems and biosphere [3, 6].

At present there are about 100 lines of environmental studies which appropriate to combine by the principles of sectoral focus, given the backward and forward linkages.

It is known that among sections of modern ecology find their place basic principles of general ecology.

After a clear separation of Applied Ecology from the Total one we can focus on solving specific problems.

It should be noted that Bioecology is the theoretical basis of the Total Ecology with all its modern problems. There are three main blocks of Applied Ecology [5]:

- Geoecology, which involves the study of relations between organisms and the environment of different geographical areas;

- Technical Ecology, which highlights the relationship of human with such objects as energy, industry, agriculture, transport, space, military activities etc. To this unit falls great responsibility for the regulation of environmental management and hardware of environment protection. This study solves the problem of waste management and damaged ecosystems recovery;
- Social Ecology defines the role of human in the environment mostly not as a biological species, but as a social being, it determines ways of optimization of the relationship between human and nature, and that is very important, creates environmental awareness and culture, determines the laws of ecological wildlife management, carry out social and environmental monitoring, lays the foundations for further development of environmental policy.

These blocks of environmental sciences are special, they inherent specific approaches to environmental monitoring and have its own scale of researches with their methods, but in common they define the type of pollution, establish the maximum allowable amount of hazardous substances in individual objects and also in air, water, soil, provide the degree of their threat to humanity and how, if necessary, to overcome the identified hazards [4].

Especially important is the knowledge of natural processes and their rational use in human life, as little as possible to create "uncomfortable" nature.

In this connection, the aim of our research was to determine the relationship of human with nature in an era of intensive development of scientific and technological progress as the new philosophy.

Main material presenting

It is known to all that everyone must promptly learn to respect the nature and with greater understanding attitude to the achievements of civilization that have become necessary attributes of everyday life (food additives, household chemicals, mobile phones, microwave ovens etc.) and be able to prevent bad habits in otherwise breach in these relationships lead to the destruction of the humanity

Human must be able to know and comprehend the peculiarities of passing both natural processes and those that occur with the use of the benefits of civilization, to answer the question - how life improvers' impact on human's health, and on whole nature? Can nature take in its bosom such products and to include them into the cycle of matter?

It is necessary to comprehend the world in which we live and it is not today's problem. We must constantly improve the relationship between human, society and nature.

It is required ethical attitude to nature and as A. Schwaizer noted very desirable is "reverence for life".

In social philosophy that studies the causes and consequences of the degradation of human habitat is expanding the scope of human freedom by creating a humane attitude both to nature and to people.

The development of environmentally oriented economy implies the harmonious development of the system "society-nature", but it is necessary that eco-

nomically created cost products were environmentally friendly and not dangerous to human.

It is necessary to have full information, objective environmental reality about humanized nature, about human activity between social world and nature and consider consequences of these relationships.

Human's environmentally substantiated relation to natural human existence place, with the creation of wealth associated with the process control natural forces (water, wind, solar), energy production, materials and harmonious attitude to the social conditions of existence, all of this is the basis of environmental culture.

The further course of sustainable development will be based primarily on the principles of ecological culture, which essentially will be different from preceding technological development. It is difficult to specify in detail ways and means of future changes in the direction of the establishment and development of ecological culture.

As you know, imbalance is restoring by nature. Now its renewable opportunities are extremely limited, and therefore we must immediately come to aid to nature. It should say its word science. During the evolution the science was not always the same. During the accumulation of a specific material and its synthesis the cognition of nature's pattern development and the impact of science intensified. Already in the XVII century the range of basic sciences, which provide powerful upsurge of production technology began to develop rapidly [8].

If we analyze how much effort of institutions not only in Ukraine but also in the world focused on how to pull from nature its wealth, and how much - to establish the limits of "permitted" impact on nature, it becomes quite obvious that such a comparison is not to favor of the protection of the environment. This is why more often we hear about social regulation of scientific activity necessity.

Such outstanding scientist as V. Vernadsky protested against the mindless science application. Unfortunately, many of his predictions were failed to appreciate. First of all it concerns nuclear physics, especially the Chernobyl disaster, 30 years anniversary of which we notes this year with great bitterness at heart. The results of horrific «experiments» become dozens of regions with millions of terminally ill people. The environmental consequences of science and technology development are quite difficult because supposedly based on good intentions, but the results often cause damage. Often technical innovations worsen the ecological situation. What scientists' responsibility for all these environmental effects? It should be noted that the feature of scientists is determined, in equal conditions, by understanding of responsibility and scientist civic maturity, his ecological culture and research results.

It is obvious that people's knowledge level reached the status of negative environmental factor that can lead to the death of humanity.

As you know not every scientific study of environmental problems improves the decision-making process within the environmental protection, helping to remove the uncertainty of the consequences of scientific and technical projects and choose the perfect in environmental meaning. Yet reached required accuracy of ecological forecasts is not very high. Scientists' interests are too narrow

and defined by the specifics of a particular science. There is no guarantee that during the scientific research relevant processes and changes will be reached. Moreover, often the factors that did not play a special role in the history of ecosystems existing become critical in conditions when the environment changes significantly under human activity influence.

It is necessary to remember that conducted in limited areas or waters observations that are limited in time intervals, only with great caution can be used to predict the development of the whole ecosystem.

Assessing the environmental effects of projects, their results should not be taken as the only correct. The most dangerous is uncertainty, because such policy can weaken the sustainability of management decisions and cause to possible undesirable consequences.

Analyzing the features of the methodology of scientific environmental expertise of scientific and technical projects N. Reimers, clearly outlined the basic laws and principles that is necessary to keep in mind during the environmental assessment and decision-making. [9] The development of science is in close contact with the social processes taking place in society. The idea that if science develops only under the influence of its internal base, nothing but a myth that is required only for those who want to hide their administrative influence on science. It should be clearly understood that science and technology in the country is a tool which largely depends on human values and needs. In this combination the science is not only reflects world, but also creates it by using the technique.

Focusing on nature conservation has become a major in science. In this regard, science must be a way of environmental safety, it has to solve environmental problems, and to be not only "industrial strength" but have more significant value. It must perform its function of material welfare providing, but not be limited only by this.

It is require to greening the technologies because modern industrial infrastructure of our country, by its nature, is not environmental but extravagance and its finished product over time becomes a waste. As known to science there are developments and implementing ideas how to achieve the least environmentally risky and most cost-effective forms of eco interaction between human and nature. But in this way there are more intractable questions, more inertia in thinking and behavior, rather than deliberate, scientifically proven solutions.

It is known, that intensive utilization of natural resources on fundamentally new basis and creation of artificial equivalents of natural things forms the objective conditions for the autotrophic production and, respectively, autotrophic human existence. It is creating such conditions when industrial, agricultural and recreational functioning of society would not be associated with subsequent breach of natural interactions and relationships. These possible solutions deserve attention as important theoretical and engineering study.

The economic consciousness, in our opinion, has today the dominant value, because human often puts economic levers as a priority, ignoring the environmental consequences. In this connection it is necessary to predict possible adverse effects in solving specific problems.

For example, reasonable from the economic point of view creation of large livestock farms which help to reduce the cost of products has difficult and even awful consequences for the environment.

Let show another fact with inverse problem solution. In the People's Republic of China in order to attract a larger number of employees to work in the countryside, the land distributed to private ownership and processed typically involving manual labor. Thus, there are no large areas of cultivated fields and it reduces the level of settlement of plant pests and diseases. Another positive aspect is the high percentage of employments in the manufacturing industry, so there are no unemployed people. It is important because that can have negative consequences for society, and it became known to one of the authors after visiting this country.

The content of the human being is intelligent independence from the nature through human reason and will. In this process, there is a "second nature", a new branch of the human activity which created in labor and completely transformed in social relations, humanized, socialized nature. Under such conditions, a human becomes an important driving force of many processes that take place around.

In this connection the interests of modern ecology transcend biological limits and turned on extensive industry knowledge. The circle of sciences involved into environmental problems expanded enormously. Along with biology, it's economics and geography, medical and sociological studies, atmospheric physics and mathematics. Thus, ecology claims to be the winner of the Sciences and seeks to assimilate all problems of medical, food and socio-humanitarian profile. Therefore ecology characterizes the interdisciplinary complex and become a holistic discipline. It is exact science in the sense that use concepts and research methods of mathematical, chemical, physical and other sciences. However, it is the humanities, because the structure and function of ecosystems affect a person's behavior, his practical activity.

Human by improving its own environment becomes a regulator and organizer of the natural world.

Thus, scientific progress requires new approaches, a new philosophy in the relations between human and nature. People as social units should review their requests that deal living conditions improvement, because by creating such conditions the relationship with nature violates, and this ultimately contributes to new problems emergence.

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