

Third Level of Organization of Environmental Protection Systems: Scientific and Literature-Philosophical Flows

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Abstract: A historical analysis of the formation of environmental trends in science, literature and philosophies is carried out in the context of the theory of multilevel development of environmental protection systems (religion, state, science, society, international law). Eastern scientific and philosophical thought of the Middle Ages and the ancient world had an advantage over the western part of the humanization of the natural component. The formation of the term "ecology" refers to the middle of the 19th century. It was connected with the end of the era of great geographical discoveries. However, ecology in the 19th century was purely practical in nature, aimed at preserving nature in order to classify reserves for future consumption. Humanitarian-philosophical understanding of the problems of ecology and aggressive-consumer society should be placed on Russian and Indian cultures in the person of L. N. Tolstoy and M. Gandhi, who suggested the synthesis of Russian, Western and Eastern thought as a means of preventing environmental disasters. The approbation problem of developing a universal international methodological apparatus is the disunity of scientific and philosophical thought: the history of mankind develops according to a cyclical model - the medieval west was not familiar with Arabic science, and today the west is also not familiar with the theory of the noosphere, which is currently not completed.

Keywords: environmental protection system, environmental ethics, environmental humanism, ecology, biocentrism.

I. INTRODUCTION

"The task of man is to deliver the greatest possible benefit to others."

V.I. Vernadsky (Vernadsky, 1926),

"The task of my generation is to prevent the world from perishing."

A. Camus (Camus, 1988),

"Today, the most influential religion of the West is environmentalism, the religion of urban atheists. Why do I call it religion? Yes, just look at their beliefs. If you look closely, it will become clear that environmentalism is a remarkable rendition of traditional Judeo-Christian beliefs and myths in relation to the XXI century. "

M. Crichton (Crichton, 1999).

The development of the nature conservation system began from pagan times, when our distant ancestors endowed with the soul and divine essence various natural objects, territories and phenomena. Respecting and deifying nature, the ancient people knew how to get on with it, imposing certain restrictions on the number of harvested plants and animals. This system has worked for thousands of years.

Population growth, limited traditional sources of energy, limited resources of fresh water and minerals, pollution of soil, water and air with substances, many of which did not exist before the 20th century — all these phenomena gave rise to what we define today as an ecological crisis already covering the whole world.

As a result, by the end of the 20th century, nature conservation began to acquire a multi-level international character, relying on state, scientific, and public institutions.

The environmental system has the following levels:

1. Traditionally religious
2. State (since the 1870s, the first protected natural areas appear as a result of their tourist development);
3. Scientific;
4. Public;
5. International (Astanin, 2019).

Modern globalization has become the cause of a host of environmental problems that can only be solved through joint efforts. Increased mass and speed of development of natural resources.

Throughout history, mankind has faced environmental problems. Gradually, the realization came that it is necessary to use natural resources wisely.

II. PROPOSED METHODOLOGY

The research procedure is based on a synthesis and analysis of theory and practice of management. In dealing with objectives the following are used:

1. Historical and genetic analysis – the study of the inception, formation, dynamics and development perspective of the environmental activity;
2. Interdisciplinary approach (the research study in the field of geography, history, cultural studies, mathematics);
3. Theoretical modeling – justification of management decisions;
4. A systematic approach.

The methodological specificity of the systematic approach is defined by the fact that it orients the research on revealing the integrity of the object and the mechanisms that provide it, on identification of the diverse types of connections of a complex object and introducing them into a common theoretical picture.

Only system objects can be controlled. Any management decisions are based on the integrated and interdisciplinary analysis of the total available information on the studied system.

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The essence of the management theory is building a model (on the basis of the system analysis), which will allow to get a control algorithm, which will lead to the most effective system performance in accordance with the management aim

III. CONCEPTUAL FRAMEWORK

The philosophy of the Ancient East developed simultaneously with religion, often representing one whole (Confucianism, Buddhism, Hinduism) (Mueller, 1995). Western philosophical thought is more pragmatic, moving away from religion. In the 15th century, after the murder of Ulugbek (Matviyevskaya, Sokolovsky, 2013), the decline of Eastern philosophy and science begins. Western Europe becomes the scientific center of natural science and philosophy.

The arrival of European science and technology to the East did not achieve the desired effect. European knowledge was fundamentally different from the Eastern and extremely poorly combined with it. Representatives of the European continent ahead of the Chinese and Indians in technology, but significantly lagged behind in psychology, which was a logical consequence of the differences in the historical ways of the scientific schools of the two continents.

The era of the Great Geographical Discoveries was the impetus for the development of various environmental trends. Conducted studies of the dependence of the living conditions of various biological species.

However, this era has made a very negative contribution: the extermination of the indigenous population of the American and Australian continents, the destruction of the flora and fauna of the African continent on an industrial scale. It was only after the approval of Western civilization on all continents that environmental disciplines began to form (development was not connected with raising the consciousness of humanity, but with solving financial and logistical problems of the distribution of natural resources).

IV. RESULTS AND DISCUSSION

A great contribution to the formation of knowledge in the field of ecology was made by the Swedish scientist K. Linnaeus. The works of C. Linnaeus "The social structure of nature" and "Saving nature" are relevant today.

The works of the French researcher J. Buffon (Bobrov, 1970) are notable for an attempt to present the joint development of man and nature, bold for the 18th century.

A. Humboldt (Humboldt, 1959) is considered the founder of biogeography (the Cosmos scientific work).

1866 - the birth of the term "ecology" and the formation of the science of the same name ("The universal morphology of organisms. E. Haeckel) (Humboldt, 1959). The most developed theoretical and experimental ecology (Kramer, 1992).

Professors of the Moscow State University K. F. Rulier (Roulier, 1954) are considered to be the founders of the Russian ecology. K. F. Rule formulated the principle underlying the environmental sciences: the principle of the historical unity of a living organism and the environment.

Ecology contributed to the increase of practical and theoretical value of such disciplines as climatology, meteorology, glaciology, oceanology, soil science, geology and geophysics. In addition, the role of geography has significantly changed, which has recently begun to develop concepts for environmental management.

Ecology contributes to the development of an interdisciplinary nature of scientific activity, seeks to solve the most important task: the harmony of nature and humanity.

Established the basic laws that take into account the dynamics of populations of biological species. However, for some time there was a lack of a fundamental unit of measurement. The ecosystem has begun to fulfill this important role. A. Tansley proposed this term in 1935: "unity limited in time and space, a natural complex formed by living organisms (biocenosis) and their habitat, interconnected by the exchange of matter and energy".

Of great importance is the humanitarian and philosophical understanding of ecology. The great Russian writer L. N. Tolstoy and the spiritual leader of the Indian nation M. Gandhi (Doronin, 2015) were prominent representatives of humanistic trends - two brilliant men substantiated and personified the ideas of non-violent progress into the world. They spread the theory of non-violence and the natural world.

L. N. Tolstoy and M. Gandhi (Doronin, 2015) were opponents of the moral principles of modern civilization - for its violent and artificial substance. L. N. Tolstoy apprehended deep concepts of Eastern culture. M. Gandhi, who received a European education, considered L. N. Tolstoy to be his mentor. The Indian leader was drawn to the unity of Eastern and Western thought; here he needed Leo Tolstoy.

The famous story by L. N. Tolstoy "Strider", which is the story of an old horse about his life. Gandhi believed that animals could tell a lot about their troubles.

Leo Tolstoy many times interpreted the synthesis of nature and technology of the beginning of the 20th century, the problems of the rules of ecology.

L. N. Tolstoy and M. Gandhi condemned the ideas of bourgeois consumer civilization, suggested ways out of imperialism to humanism.

The synthesis of Russian, Western and Eastern thought proposed by L. N. Tolstoy and M. Gandhi served as a preventive measure for an ecological catastrophe. Non-violence is an alternative to a "soft" attitude to nature. One of the works of L. N. Tolstoy: "The law of violence and the law of love."

M. Gandhi (Doronin, 2015) proposed to modify Hinduism with its veneration of living beings into the framework of modern society.

Representatives of Russian cosmism (Subetto, 2017) were engaged in the development of ideas for the coexistence of nature and man on the scale of space.

Russian cosmism talked about the tasks of man to preserve not only our planet, but also the entire universe, in which man is a rational being, a conductor of divine ideas. Russian cosmism was one of the ecological currents that crossed the humanistic contradictions of the Renaissance. The picture of the world regained its integrity and unity, as it was in ancient times. Man again became part of nature. Nature and cosmos are the parents of man. Thought is the main component of evolution.

Russian cosmism was the last step before the teaching of the noosphere (Subetto, 2017). He demanded understanding and generalization of a huge amount of research and transition through scientific traditions that dominated in the 19th century.

In the book *Essays of Geochemistry*, written in France (in Russian, it was published in 1927) (Vernadsky, 1926), V. I. Vernadsky reasoned: "With man, undoubtedly, a new enormous geochemical force appeared on the surface of our planet. The equilibrium in the migration of elements, which has been established over long geological times, is disturbed by the mind and activity of mankind. We are currently in a period of change in this way by the conditions of thermodynamic equilibrium within the biosphere."

These provisions were discussed in 1924 - at the conference of A. Bergson; where, probably, the concept of "noosphere" was formed. Noosphere (Subetto, 2017) is presented as a certain ideal of the rational organization of human life on the planet, the harmonious being of different peoples and cultures.

One can reflect on the impact of the noosphere reform on the previously proposed "natural" biosphere, but it is not possible to deny that we live in an environment that has been altered by a human being, with all the ensuing results.

Based on the work of V.I. Vernadsky, it can be concluded that the noosphere represents the unity of the natural and historical processes, is a phenomenon of a planetary scale.

Noosphere is a nature-centric concept (Subetto, 2017). Man in him is not only a part of nature, but its offspring, firmly connected with it. It does not so much reverse the development of the noosphere, as it is part of its evolution.

The teachings of V.I. Vernadsky (Vernadsky, 1926) have enormous potential in the conditions of Modern environmental problems, and also serves as the basis for many modern ecological movements.

As the second great thinker associated with the idea of the noosphere, P. T. de Chardin (de Chardin, 1973), who developed the theory of the spiritual evolution of the Universe, striving for the highest point of Omega, can be called. He believed that evolution is more than a hypothesis and theory; everything must be subject to evolution: everything that is rational. Man is not the center of the world, but the axis of evolution.

A. Naess (Naess, 1977) attributed environmental ethics to the underlying human values. In his opinion, the life and prosperity of living organisms is a fundamental value.

In the manuscripts of B. Spinoza there are lines stating that man's responsibility for changes in nature is close to existentialism.

J. P. Sartre (Sartre, 1948) believed that the principle of humanism "man is the highest value" leads to fascism and environmental disasters.

M. Heidegger (Heidegger, 1988) concluded that humanism and humanity are different concepts. The humanism of the Renaissance was focused on the domination of nature.

N. A. Berdyaev (Berdyaev, Spears, Kanter, 1950) warned about the payback for humanistic egoism of man. Man put himself on another step, higher than nature. Although, he had to connect with her.

A. Leopold (Leopold, 1983): "a person must respect the rights of other inhabitants of the planet, be aware of their ordinary position and responsibility".

D. Rodman (Rodman, 1978) developed the theme of environmental sensitivity, the ability of man to perceive animals as subjects with their own views on the world.

D. Brynbacher spoke about two types of environmental ethics: ideal and necessary.

According to D. Brynbacher: "we must strive for the

ethics of the ideal, but always follow the ethics of the necessary."

V. CONCLUSION

Today, environmental ethics is one of the sections of social philosophy. In the 1970s environmental ethics began to organize into an independent discipline.

A progressive line in environmental education is humanitarian ecology — a flow that takes into account the development (aesthetic, ethno-ecological, ecological and psychological) of humanitarian pedagogy.

Humanitarian ecology studies the ethnic, cultural, psychological aspects of human relations with nature.

Under the rational nature management, the "activity system ensuring the economical exploitation of natural resources" appeared.

In addition to the above, it is worth noting the independent discipline "restorative environmental management".

In modern science, the term "undisturbed ecosystems" is often used.

According to various studies, such ecosystems make up 27% of the total land area, including 15.6% in Europe and 43.5% in Asia. 36.7% of the land area is credited with partially disturbed land. However, in Russia, the share of undisturbed ecosystems is 65%, so our country has the best position to contribute to global environmental safety.

The wilderness areas category (wild lands) has been introduced in the USA. These are undeveloped areas for elementary recreation and support for the natural ecosystem. In the USA, 630 of them are counted, 42% are included in national parks, 33% belong to the Forest Service, the Fish and Game Service is responsible for 20%, and the Land Use Bureau is responsible for 5% (Land, value, community 2002).

Restorative environmental management includes measures of ecological regulation (theoretical basis) and conversion (practical influence). Nowadays, the term "nature production" is proposed.

The philosophy of biocentrism influenced the approach to the design of national parks in the United States (Attfield, 2012). In the second half of the 20th century, an opinion emerged in American society that national parks should not be meant for all people: nature should be preserved unchanged.

Biocentrists recommend maintaining (and, where necessary, recreating) biofeedbacks within each park in the state in which they were inherent in these places until a white person appeared in them.

The approbation problem of developing a universal international methodological apparatus is the disunity of scientific and philosophical thought: the history of mankind evolves according to a cyclical model: the medieval west was not familiar with Arabic science, and today, the west is also unfamiliar with the theory of the noosphere, which is not yet complete.

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