

Advances in Social Science, Education and Humanities Research, volume 356

2nd International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2019)

# Ecology and Economics: Socio-philosophical Aspect\*

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Abstract—In modern informational society, the necessity of a socio-philosophical rethinking of the essence of material production, clarifying the identification of its links with culture and the natural environment, in accordance with the new situation of man in the world, in the context of the global environmental crisis, the development of world-historic processes of informatization and globalization is increasing. The goal of this paper is to conceptualize the provisions of the socio-philosophical theory of interaction between ecology and economics by analyzing aspects of the ecological regulation of economic relations. On the basis of a holistic philosophical methodology, the initial principles of the research are the principles of integrity and integrity of the world, its internal unity, sustainable development. Taking into account the need to meet human needs on the basis of the relationship between society and the biosphere, in this paper, the place of the ecologically-natural component in the system of modern society is revealed, within the framework of social philosophy, the concepts of ecological consciousness and ecological culture of the society as a whole and of the individual are revealed, in particular. The model of partnership of ecology and economics is substantiated; the meaning of the concept of ecological regulation of the economy is clarified as the regulatory role of the environmental demand and ecological values and norms in socio-economic activities.

Keywords—social philosophy; environmental responsibility; sustainable development; environmental culture; social responsibility; culture

#### I. INTRODUCTION

Modern society, which forms its key global-planetary strategies based on the development of engineering and technology, reveals a number of controversies that are a source of social risks and dangerous destructive tendencies [1]. First of all, this is a contradiction between the integral being of man, the preservation of his nature and culture, on the one hand, and the rapid growth of the technogenic component of the social environment, on the other. Since the need and the task of rethinking the foundations and goals of the development of the economic system of society and its interaction with nature, including human nature, is global in scope, the demand for a new paradigm of economic

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philosophy as a direction of social and philosophical knowledge which is based on an ecological world view and corresponding values and principles of management is becoming increasingly obvious.

The movement towards these goals requires a sociophilosophical study of the modern space of interaction between ecological and economic processes. The harmonization of economic and environmental development [2] serves as an immediate prerequisite for solving environmental problems and the transition of modern society to sustainable development. The fact that in the modern process of globalization its cultural and humanistic guidelines should come in line, on the one hand, and the practice of modern management, in which it is necessary to overcome the man-made "bias", destructive in relation to nature and the environment is among the important implications of this process.

One of the conditions for the solution of this problem is the rethinking of the interaction of the economy, society and nature. Relations between them, which today are sources of contradictions and conflicts, should become the sphere of harmonization of reality, focused on the integrity. In fact, there is a need to adjust the conceptual model of modern society and its economy, taking into account the factor of globalization and increased social responsibility for the fate of subsequent generations of people [3]. It is about overcoming the traditional interaction of nature and the economy from the standpoint of the latter's domination and replacing it with relations of partnership, which provides positive prospects for both nature itself and society.

# II. ECOLOGICAL ASPECT OF ECONOMIC BEING AS AN OBJECT OF THE STUDY OF MODERN PHILOSOPHY

Analysis of modern social philosophy shows that the problem of the economic entity of modern society in its environmental dimension has become the subject of a certain scientific tradition.

So, the issues of the interdependence of globalization, ecology and economic growth were investigated by Beddington J. R. & May R. M [4], as well as Winter, S.G. & Nelson R.R. [5], who proposed to combine social and biological approaches in the study of economics. Repetto R, based on an analysis of socio-economic government policies

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<sup>\*</sup>The study was carried out with the financial support of the Russian Foundation for Basic Research (RFBR) in the framework of the scientific research project ("Social knowledge: the challenges of modern technogenic civilization"). Project No. 19-511-44003



in developing countries, as well as in the United States, drew attention to the urgent need for change for the sustainable management of resources [6]. The question of the unity of man and nature, as well as the need to control social and environmental development, was continued in his studies by N.N. Moses [7]. In the framework of the widely known concept of ecological economics, R. Costanza [8] and H.Daly [9] substantiated the need to take into account longterm externalities in ecological and economic development and to form an integrated system of environmental and economic accounts. Mesarovic M., McGinnis D. and West D. [10] investigated the prospects for sustainable development based on the mathematical theory of general systems. R. Pindyck made an attempt to model risks and return on investments in the long-term forecast of climate change on the globe in terms of taking into account environmental requirements [11].

However, up to the present time in science works specifically devoted to the consideration of the economic life of modern society from eco-oriented positions of social ecophilosophy, as a philosophical approach, to the study of man, culture, science, society in general from the standpoint of integrity and consistency were not so popular. These include the work of D.Rapport, which substantiated the uniqueness of economic approaches that consider nature only as a commodity, as well as the need to combine economics and ecology in the interests of future social development [12]. Interesting study created by Shin D-H. and Park Y.J, who undertake a socio-philosophical analysis of the ecosystem of the Internet of Things, its influence on the development of the socio-economic environment in the context of humancentrism [13].

From our point of view, approbation of the ecophilosophical approach in socio-economic research is important because the philosophy of economics is not yet mastering new trends and paradigms that are emerging at the intersection of modern social philosophy, philosophy of economics and social ecology.

When writing this paper, the authors used the holistic methodological principle, according to which the object of study, the environmental regulation of the economy as a subject of modern social philosophy, is studied as a whole, in the unity of its various aspects.

## III. ECOLOGICAL DETERMINATION OF ECONOMIC SPACE IN THE CONTEXT OF SOCIAL PHILOSOPHY

The relevance of analyzing the problem of interaction between the economy and the environment is determined, above all, by the need for further conceptualizing the paradigm of sustainable development, which is a model of the socio-economic life of a society, which if implemented, satisfies the vital needs of the current generation of people without depriving such possibility of future generations [14]. Ensuring sustainable development requires not only technological changes and investments in the environment, but also a change in the priorities of the development of society and innovations in the social sphere. The economy of modern society, focused on growth and more and more complete satisfaction of human needs, should become an ecological economy aimed at the sustainability of the holistic ecological and economic system of the planet. Economic activities, implementing the concept of sustainable development, should include the unity, interaction of environmental, social and economic activities, taking into account the fact that the system "biosphere - society economy - natural resources" acts as a single and internally interconnected.

The problem of ecological determination turns out to be closely related to the need to identify the place of the ecological component in this system, as well as the peculiarities of its interrelation and interaction with other components - the economy and society. Since the relations between them have the status of a special "partnership", ecology holds its position in the context of these interrelations only as an active party regulating the parameters of the economy and the beliefs of society, based on the objective laws and features inherent in it.

In other words, this problem boils down to discovering in which forms of environmental consciousness and actions are people who are and are aware of themselves in the environmental space and act as vehicles of environmental laws and regulations that can influence the goals and guides of the economy, its priorities. This environmental impact is carried out in a special ecological space, which functions and is perceived as a sphere in which environmental laws are discovered and relate at the level of their existence, that is, the sphere of maximum openness of nature for society in the context of the principle of coevolution and the stability of society's interaction and nature. It is important to emphasize: although such space has long existed in traditional economic activity and represents the sphere of its impact on nature (which has already seriously damaged the environment), but within the framework of the partnership model, the properties of this space change radically, it reveals not only the "incompatibility mode" "Nature with the policy and practice of economic expansion, but also highlights the parameters in which the natural and environmental resources provide prospects for the development of the economy itself [15].

In accordance with the norms of ecological economics, such an impact is provided for it by a new and still poorly disclosed resource, which must acquire its organizational and technological forms and norms of development. The economic and social development of this resource is the value-semantic and cultural basis of the economy-ecology partnership, which reveals the connection and dependence of the socio-economic aspect of this relationship - human interests, preferences, attitudes, technologies and culture - on the laws and the requirements of nature, the environment. It is in this way that the economy can not only recognize and master the breadth of ecological opportunities and closely related environmental constraints, but also be involved in preserving the integrity of eco-biological systems in order to ensure the prospects and mechanisms for its sustainability.

One of the priority tasks of the socio-philosophical understanding of the interaction of ecology and economics is



to change the content of the "ecology-economy" space, in which the ecological imperative and relevant standards begin to play a significant role, thereby creating an ecological economy, acquiring new values, self-awareness, and new benchmarks of its development. If today the state and the economy regulate the state of ecology on the basis of environmental activities, forming legal, technological norms that prevent the pollution of nature (that is, keeping the installation on its resource status and role in maintaining human health) and in some places introducing "green technologies", then the active inclusion of eco-logic changes the economic policy and the very concept of the economy: the orientation is not so much on the growth of consumption, but on the identification of all the parties and factors that preserve the sustainability of the economic process through its determination of the integrity of the socio-ecological, cultural and economic system.

## IV. ENVIRONMENTAL CULTURE AND ENVIRONMENTAL Responsibility

The areas of environmental impact on the economy include integrating the norms of ecological culture into its space, changing economic self-consciousness and priorities, including natural resources not only at the level of raw materials, but also as an economic product — for example, "environmental services". It is through this introduction that the partnership of the economy and ecology begins to take shape: each of these parties turns out to be in demand in its "half". The source of such interaction - its relevance in society - is the realization that it is aimed at solving the fundamental problems of modern humanity [16].

So, one of the areas in which the ecology determines the economy is the formation and activation of environmental responsibility and environmental culture. Environmental responsibility acts as the highest level of reflection of the natural and artificial environment, the inner world of man, understanding of his place in the world of nature. This term is traditionally understood as a set of ideas about the complex relationships between elements of the "man-nature" system, as well as beliefs that have been directly formed in society about the relationship of individual and group subjects to the natural world, and the corresponding strategy of directional interaction with nature. This understanding is rather hypothetical, as it allows an ambivalent attitude to nature, corresponding to different ethical behavioral patterns consumer and cultural-value behavior. The differences between these models cover the level of "opposition to inclusiveness": a person is thought of as being outside of nature or as part of it; as well as the level of subject-object interaction: nature is perceived solely as an object of influence, or as a subject of interaction with a person. In turn, such interaction can be expressed in a consumer or spiritualmoral setting [17].

The specificity of environmental responsibility is in its integrity, which allows to preserve the cultural and ethical paradigm as one of the main ones in understanding the ecological picture of the world. If we connect this consciousness with a worldview, then an ecological ideology is revealed, in which the important provisions are the recognition of the equivalence of all life forms, the principle of unity and harmony of man with nature, the principle of social responsibility, etc. "Society will not survive without environmental responsibility. This consciousness must penetrate into all areas of science, technology and production and change them so that they contribute to the survival of mankind, and not its death. The essence of environmental responsibility is a reflection of the real practical relations of society. The society needs to know environmental standards, rules of conduct, so as to have a high level of environmental culture" [18].

Thus, environmental responsibility is a special direction of socialization of a person and groups, communities socialization based on the development of essential properties and standards of ecology. The formation of modern environmental responsibility includes such areas as: scientific (theoretical ideas about the natural environment and human interaction with it), economic - awareness of the importance of environmental standards and requirements in the field of production; cultural striving to preserve nature as part of the cultural environment, as well as value-ethical, political, etc. The most important manifestation of environmental responsibility is the ecological world view, the principles of which are expressed in ecophilosophy and social ecology.

The formation of environmental responsibility is an important condition for the involvement of our contemporaries in the emerging ecological paradigm, considering reality not from the standpoint of personcenteredness, but from the standpoint of the integrity of the nature-society-culture-economy system. It is in this context that the problems of the value of life in general and the danger of its degradation, the needs of its preservation are initially at the centre of environmental responsibility, with its development comes the awareness of the limited natural resources, the need to abandon the paradigm in which man dominates nature, an integral part, and establishing a dynamic balance between society and natural systems. On this basis, the ecological crisis itself can now be perceived not as problems in the environmental activities of the state and society, which can be resolved on the basis of expanded funding, but as a fundamental violation of the underlying and objective norms of interaction between society and nature, the most important "mediator" of which is the economy as a material production system.

Thus, environmental responsibility and world view are the foundation of the formation of the ecological paradigm, in the context of which the ecological "development" of the modern economy is carried out. Ecological culture plays an important role in this aspect.

Ecological culture includes the system of spiritual installations and values, the requirements of environmental ethics, humanism in relation to the environment, etc. as a static component, as well as the process of implementing environmental knowledge in practical activities, as a dynamic component. In the Moscow International Declaration on Ecological Culture (Moscow, May 7, 1998) the following principle was formulated: "Ecological culture presupposes such a way of life support in which society is a system of spiritual values, ethical principles, economic mechanisms, legal norms and social institutions form the needs and ways of their implementation, which do not create a threat to life on Earth" [19].

Now the problem of ecological culture in its different interpretations is the subject of active and growing research. For example, S.N. Glazachev and A.V. Gagarin analyze the acmeological content of the concept of "ecological culture", highlighting in it such features as the inner foundations of personality behavior, its attitude to itself and to the world; lack of egocentrism and respect for the extrapersonal world, first of all, the world of nature, equal partnership in relations with this world; responsibility for their behavior and interaction with other natural objects; integrity and systematic self-organization in achieving goals, provided that the relations between the elements of the system are harmonized; the inclusion of the principle of reproduction of life on Earth in the worldview of the personality and its relation to the world, etc. [20]. These characteristics of ecological culture contribute to the sphere of industrial activity and relations not only new world outlook, but also deepen the content of collectivism, production interaction like harmonization of interests, setting on humanism, mutual aid, support of creativity, etc.

This scientific study reveals the thesis: mastering the norms of ecological culture transforms the norms of industrial ethics and organizational culture. But the norms of ecological culture themselves must be achieved through upbringing, personal education, provided that the most effective way of shaping a person's abilities for environmental activities and environmental behaviour are developing educational technologies. Such technologies make it possible not only to obtain knowledge as information, but also to internalize it, at the same time developing oneself as a person, assimilating data based on the principles of environmental friendliness and humanism.

#### V. CONCLUSION

The correspondence between an economy oriented to being and the preservation of mice and men, and its ecological position and policy is determined by the adoption of the main world-view thesis of ecology: its essence and basis is the organic unity of all forms of living matter, including man.

Thus, one of the first criteria of environmental impact on production is the status of nature in the economy, which determines the perception of nature as an independent partner of human economic activity.

This is the image of nature in the context of society and culture, which expresses the relationship nature-society as something whole. The basis of such nature simulation is the new structure of the worldview, in which space the following principles stand out: the rejection of the hierarchical world views where a person stands on top of a hierarchy, in favour of an ecosystem approach, in which a person is considered as one of many interdependent types of global ecosystem; approval of the main goal of interaction with nature to maximize the satisfaction of the needs of both humans and the entire natural community; the spread of ethical norms on the interaction of people with the natural world. Since nature is perceived as a full-fledged subject in its interaction with man, protection activities are dictated by the need to preserve nature primarily for its own sake, and not in order to meet human needs.

The environment should be perceived and developed not only as a result of economic impacts, but as a source of harmonious and coordinated relations between society, the economy and nature, between nations and states. Today the economy is not balanced due to the technogenic bias in its mechanisms and methods. Profit as a goal and a "cell" of the economic sphere should measure not just the amount of money spent and money raised, goods released and sold, but the growth of the cultural and human world, which is ensured by a balanced economy and natural environment.

Thus, this direction of the impact of ecology on the economy acts as a means of its humanization, a kind of "humanization". It is this sense of the economy that serves as its quality, corresponding to the modern processes of globalization. Hence, the economy should become a means of bringing people closer together, forming a single planetary humanity. It is necessary to abandon the realization of the economic system as a special "machine" aimed at the development of social inequality and exploitation in the world, at the increase of man's power over nature, which results in the degradation of society, personality and culture.

#### REFERENCES

- [1] N.N. Gubanov and N.I. Gubanov, "Mental Responses to Risks in Modern Society," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 1003-1007, 2018. DOI: 10.2991/cesses-18.2018.220
- [2] Vitaly Yu. Ivlev, Marina L.Ivleva, V.I. Falko, "Ecology of the external and internal environment of the socio-natural system", Voprosy Filosofii, 2019 #5. P.214-218.
- V.A. Nekhamkin, "Synergetic and Modern Historical Knowledge: [3] Possibilities and Limits," Istoriya-Electronnyi Nauchnoobrazovatelnyi vol. 2015. zhurnal, 6, no 7, DOI 10.18254/S00012222-3-1
- [4] Beddington J. R. & May R. M. The Harvesting of Interacting Species in a Natural Ecosystem, Scientific American, 1982, 247(5), pp. 62 – 69
- [5] Winter, Sidney G. and Nelson, Richard R. An Evolutionary Theory of Economic Change. Harvard University Press, 1982
- [6] Repetto R. (1988). The forest for the trees? Government Policies and the Misuse of Forest Resources. World Resources Institute, Washington, DC.
- [7] N.N. Moiseev Modern anthropogenesis and civilizational faults. Ecological and political analysis // Questions of Philosophy. 1995. №1. Pp. 3-30.
- [8] Costanza R. (1997) Frontiers in Ecological Economics: Transdisciplinary Essays. Edward Elgar Publishing Inc., Northampton, USA.
- [9] Daly, H.E. (1999) Ecological Economics and the Ecology of Economics: Essays in Criticism. Edward Elgar Pubishing Inc., Cheltenham, UK.



- [10] Mesarovic M., McGinnis D. and West D. (1996) Cybernetics of Global Change: Human Dimension and Managing of Complexity. MOST Policy Paper, 3, UNESCO, Paris.
- [11] Pindyck R.S. (2014) Risk and Return in the Design of Environmental Policy, Journal of Association of Environmental and Resource Economists. 1(3), pp.395-418.
- [12] Rapport D.J., (1997) Economics and ecologically sustainable futures, International Journal of Social Economics, 24(7/8/9), pp.761-770.
- [13] Shin D-H., Park Y.J., (2017). Understanding the Internet of Things ecosystem: multi-level analysis of users, society, and ecology, Digital Policy, Regulation and Governance, 19 (1), pp.77-100.
- [14] Vitaly Yu. Ivlev, Marina I.Ivleva, Marina L.Ivleva, "Ecological Regulation of Economy as a Concept of Social Philosophy", Voprosy Filosofii, 2019 #7. P.107-117.
- [15] E.Barkova, M. Ivleva, O.Buzskaya, and M.Buzskij, "Ecology of culture in the space of social and humanitarian knowledge", Proceedings of the 2017 2nd International Conference on Contemporary Education, Social Sciences and Humanities((ICCESSH 2017). Series "Advances in Social Science, Education and Humanities Research", vol. 124, pp. 12-15, 2017. DOI: 10.2991/iccessh-17.2017.3
- [16] N.N. Gubanov and N.I. Gubanov, "Mental Bases of Social Solidarity," Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series "Advances in Social Science, Education and Humanities Research", vol. 283, pp. 998-1002, 2018. DOI: 10.2991/cesses-18.2018.219
- [17] V.Yu. Ivlev, M.B. Oseledchik, "Methodological principles for the introduction of modality categories in modern scientific cognition," Proceedings of the 3-rd International Conference on Arts, Design, and Contemporary Education (ICADCE 2017). Series "Advances in Social Science, Education and Humanities Research", vol. 144, pp. 541-545, 2017. DOI: 10.2991/icadce-17.2017.128
- [18] N.V. Ulyanova Ecological consciousness and ecological culture, problems and perspectives // Tomsk State Pedagogical University Bulletin. 2007. № 6 (69). C. 57-61.
- [19] V.A. Yasvin The formation of environmental culture is not reduced to environmental education // On the way to sustainable development of Russia. 2006. Vol. 34. P.7-9.
- [20] S.N. Glazachev, A.V. Gagarin Ecological culture as the highest achievement of an individual at the stage of development of the information society // Bulletin of the International Academy of Sciences. Russian section. 2013. №1. Pp. 16-20.