

## PHILOSOPHICAL AND METHODOLOGICAL PROBLEMS OF INTERACTION OF SOCIETY AND NATURE

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**Abstract:** Philosophical and worldview studies of the person's influence on nature, carried out based on analyzing the development of modern science and technological achievements, are a significant factor in the nature and specificity of changes in the ecological situation in the future. Optimal management of the current ecological situation is possible based on the formation of new worldview fundamentals of a person's scientific and technical attitude towards nature. The goal and result of optimal management lies in ensuring an ecological situation that will enable the effective co-existence of people and the natural environment. It is necessary to search for new approaches to overcome the destructive consequences of the widespread consumer-pragmatic attitude of a person to the natural environment that requires a critical revision of the consumption culture, which causes a violation of the technical and humanitarian balance in the world. The nature of the interrelationship between human interests and natural resources in Ukraine has been developing inconsistently with the requirements of unhindered development and conservation of the natural environment. Using the natural resource sphere leads to the gradual destruction of nature and the entire environment by a person. The connection between the development of society and the consumption of natural resources, the contradictions and problems arising from this have been and remain the focus of attention of numerous scientists, politicians, entrepreneurs, practitioners, philosophers and scientists. This is understandable, forasmuch as human activity is closely related to the sphere of natural resources and natural potential. The purpose of the academic paper is to characterize the features of the interaction between a person and nature from the viewpoint of revealing the philosophical and methodological problems of this issue. Methodology. In the course of the research, an analytical and bibliographic method was used to study the scientific literature on the interdependence of nature and a person, as well as a questionnaire survey for the practical clarification of certain aspects of the philosophical and methodological problems of the interaction of the society and nature. Results. Based on the research results, the features of human activity from the viewpoint of his impact on the natural environment were studied, and separate philosophical and methodological standpoints on this issue were investigated.

**Keywords:** co-evolutionary coexistence, consumer-pragmatic attitude, harmonious coexistence of a person and nature, natural resource management, optimal management, protection of natural resources.

### 1 Introduction

The harmonization of all spheres of human life cannot bypass the appeal to the relationship between a person and nature, because nowadays, more than ever before, the human recognizes his genetic dependence on the laws of the development of nature as a super system. The person's attitude towards nature as a bio-socio-spiritual being is an important part of social life, containing moral and value content and, to some extent, depending on the choice of methods and features of production and consumption. On the subjective level, this is a kind of projection of criteria and evaluations used in interpersonal communication and in relations with the world (Griffen et al., 2022).

In the process of gradual understanding of interrelationship between the society and nature and a human, the very concept of ecology is transformed and ecological knowledge and its

properties are differentiated in various aspects – sociological, psychological, legal, economic, and geopolitical, etc.

In the theoretical part of the present research, the concepts and features of the process of optimizing the interaction between society and nature have been substantiated. Attention is focused on the material and energy information exchange between society and nature, and destructive relations between society and natural resources. Ways of forming a new way of thinking have been outlined.

The practical part of the research includes an assessment of the prerequisites that make it necessary to review the interrelationship between the human and nature, the most promising directions of scientific and philosophical developments on the issue of the interrelationship between a person and the natural environment. It also includes highlighting the necessary changes in the philosophical and methodological aspect of scientific developments on the issue of human-nature relations and factors contributing to the formation of an ecological worldview, as well as the gradation of global goals that determine the general direction of ecological ideology as a conscious appeal to the future.

Based on the research results, conclusions were made regarding the issues raised. In particular, it has been established that, according to the survey participants' viewpoint, currently, in the conditions of the deterioration of the ecological state of the planet, the need arises to review the interrelationship between a person and nature in different periods of the human civilization development, in particular, with the emergence of the global ecological crisis and the exacerbation of psychological and philosophical conflicts in human relationships and nature. At the same time, scientists all over the world are paying more and more attention to the philosophical aspects of this issue. And the most promising directions for further development of problem outlined are the uncontrolled growth of the world population, increased industrial needs for mineral processing products, and uncontrolled environmental pollution. The basic factors contributing to scientific study on solving the issues of the interaction of society and nature, which are currently the most effective and in demand in the scientific field, are ecological systems, implemented in one way or another in relation to nature, and the skills of rational nature management. At the same time, according to the respondents' standpoint, in order to achieve eco-ideological norms, humanity must achieve safety and an efficient food system.

### 2 Literature Review

The idea of the dialogue between a human and nature in the research is nothing new. Nowadays, the issue of the joint development of society and nature, taking into account the specifics of co-evolutionary coexistence, is gaining particular importance. It is the concept of co-evolution of nature and society, based on the idea of an optimal relationship between society's interests and the possibilities of the biosphere, that becomes the key to understanding human nature and determining the fate of mankind, also due to the fact that the speed of natural and social evolution do not coincide. Without such a synthesis, it is impossible to understand a person in all the drama of his relationship with nature, and, consequently, it becomes impossible to create a truly workable strategy for the interaction of nature and society (Carrier & Gartzlaff, 2020), (Sideris, 2017).

It should also be taken into account that a human and nature are substances of the universe, and they cannot exist independently of each other; at the same time, they must find a balance in interaction (Lahoz-Beltra, 2018).

The main feature of optimizing the interaction between society and nature is that the emerging relationships are complex and dynamic. The previous (industrial) model of society development was aimed at increasing the material product due to the expansion of the extraction of raw materials and the attraction of additional energy, leading to catastrophic environmental pollution. The new model is primarily aimed at the development of science, the growth of the amount of knowledge and information in general, the use of renewable energy sources, and environmental protection. In this case, we are talking about states that have changed the direction of their development in favor of protecting and preserving their own natural resource potential and improving ecology (Popkova, 2018).

If considering nature and society as components of a single system, then it can be argued that their development is subject to the system's general laws as a whole and the specific laws for each subsystem. At the same time, the laws of nature have a universal character. Many of them also operate in society. At the same time, only such a social-economic system can be viable, the laws of which do not enter into irreconcilable contradictions with the laws of nature. Therefore, the fate of the future of civilization depends on the harmony of the interrelationship between a human and nature and the harmony of countries in solving global problems (Zwart, 2022).

In addition, the negative changes occurring in nature are increasingly approaching the critical mark in many of the most important parameters. Therefore, the time frames for solving global problems are strictly defined. Consequently, the idea of a "new enlightenment", a fundamental transformation of thinking, the result of which should be a holistic worldview, humanistic, but free from anthropocentrism, is open to development (Box-Steffensmeier et al., 2022).

Currently, regulation and optimization of the interaction between a human and nature is complicated by the fact that a significant part of natural resources is rapidly depleted and cannot be restored. Considering that natural resources are exhaustive, economic agents should consider that by consuming an additional unit of such a resource nowadays, they will reduce the amount of consumption available in the future.

These and other destructive factors in the interrelationship between a human and nature convincingly testify to the need for a radical change in the format of the social development policy, a sharp limitation of the consumption of natural resources, the search for an alternative to raw materials that would contribute to its natural recovery. It is obvious that these pragmatic tasks, which are currently being solved by humanity and at the same time constantly bringing new natural resources into circulation, cannot be solved in the long term. Contemporary global challenges of a long-term nature (in particular, the depletion of the environment and its resources, which, in particular, causes conflicts over resources, new types of diseases, global warming and a number of others) may remain unresolved within the framework of the current model of economic growth (Mohan & Kelly, 2020), (Dawadi et al., 2021).

### 3 Aims

The purpose of the research is to determine the standpoint of scientists conducting studies in the field of interaction between society and nature regarding the specifics of philosophical and methodological problems related to the formation of an ecological worldview and natural resource management.

### 4 Materials and Methods

A practical study of modern philosophical and methodological tendencies concerning the issues of the interaction of society and nature was carried out by surveying 232 scientists conducting scientific and pedagogical activities in 24 institutions of higher education in the Vinnytsia, Cherkasy, Volyn, Rivne, Zhytomyr and Kyiv regions of Ukraine. The research was conducted using the Survey Planet service.

### 5 Results and Discussion

According to the survey participants' viewpoint, currently, in the conditions of deteriorating the ecological state of the planet, the need to review the interrelationship between a human and nature in different periods of the human civilization development, in particular, is caused by the following prerequisites (Figure 1):

Figure 1: Prerequisites causing the necessity to review the interrelationship between a human and nature, %



Source: compiled by the authors

As the survey has shown, based on the scientists' viewpoint, the most important prerequisites causing the necessity to review the interrelationship between a human and nature are the emergence of the global ecological crisis and the exacerbation of psychological and philosophical conflicts in the interrelationship between a human and nature.

According to scientists' assessments, human civilization has existed for 2-3 million years. But until recently, nature has managed to cope with often unreasonable human actions. The situation has worsened dramatically in the XX century. In this regard, scientists all over the world are paying more and more attention to the philosophical aspects of this issue. In particular,

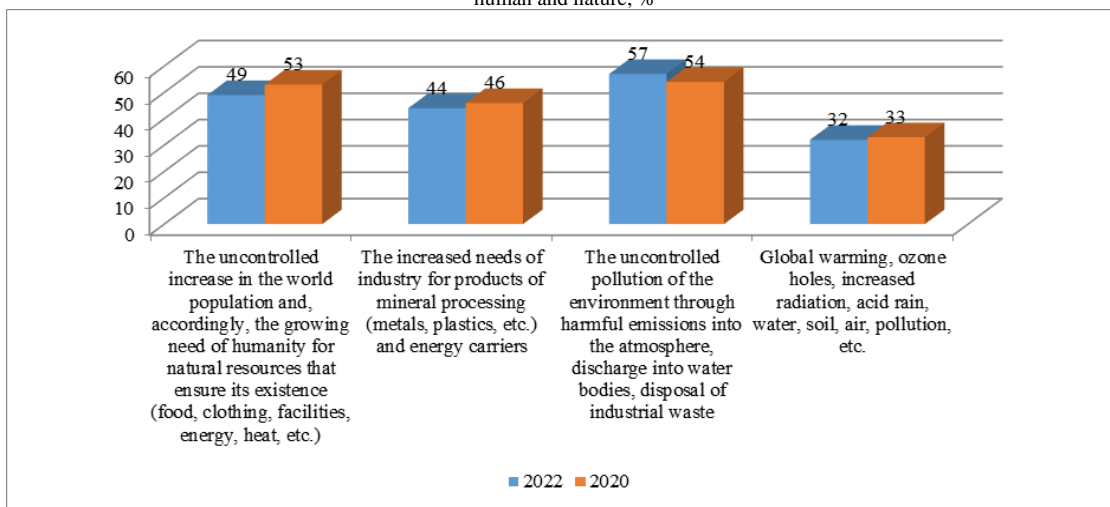
the most promising directions for further development of this problem are as follows (Figure 2):

- the uncontrolled increase in the world population and, accordingly, the growing need of humanity for natural resources that ensure its existence (food, clothing, facilities, energy, heat, etc.);
- the increased needs of industry for products of mineral processing (metals, plastics, etc.) and energy carriers;
- the uncontrolled pollution of the environment through harmful emissions into the atmosphere, discharges into water bodies, disposal of industrial waste.

The relevance of studying the human ecology requires the solution of global problems of humanity and the transition to the ecology of complex and multifaceted human activity (Figure 3):

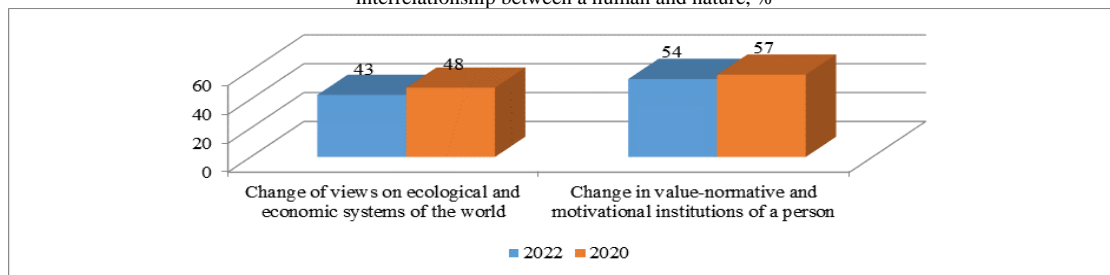
According to the survey participants' standpoint, systemic changes in the philosophical and methodological aspect of scientific developments primarily require changes in the value-normative and motivational institutions of a person.

Figure 2: The most promising directions of scientific and philosophical developments on the problem of the interrelationship between a human and nature, %



Source: compiled by the authors

Figure 3: Assessment of the necessary changes in the philosophical and methodological aspect of scientific developments on the issue of the interrelationship between a human and nature, %

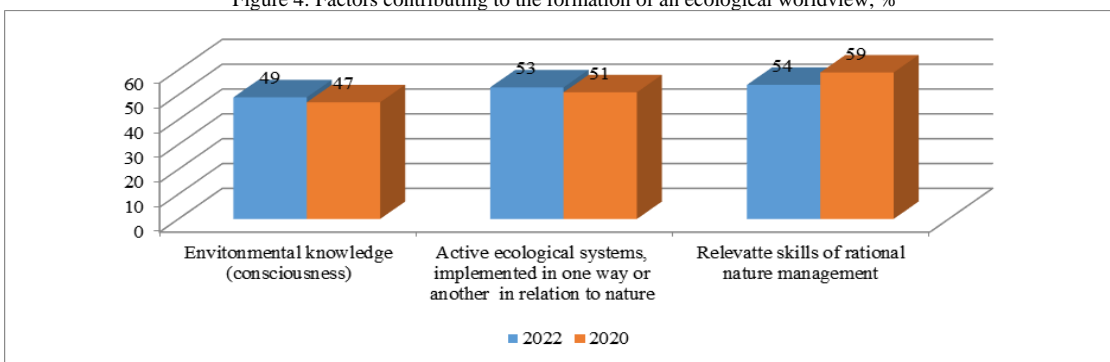


Source: compiled by the authors

In the course of the research, respondents were asked to identify the principal factors contributing to scientific studies on solving problems of the interaction of society and nature, which are

currently the most effective and in demand in the scientific field and contribute to the formation of an ecological worldview (Figure 4):

Figure 4: Factors contributing to the formation of an ecological worldview, %

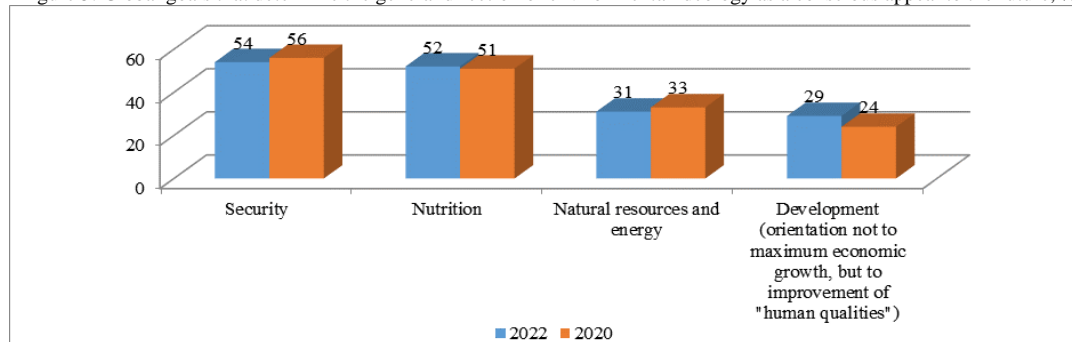


Source: compiled by the authors

As the survey has shown, such factors are ecological systems implemented in one way or another in relation to nature and the skills of rational nature management.

Along with this, according to the respondents' standpoint, to achieve eco-ideological norms, humanity must implement at least such global goals that determine the general orientation of ecological ideology as a conscious appeal to the future (Figure 5):

Figure 5: Global goals that determine the general direction of environmental ideology as a conscious appeal to the future, %



Source: compiled by the authors

- security;
- nutrition.

The universe unites the simultaneous existence of nature and a person, guaranteed by the balance, the interrelationship between them. A person is a higher substance, a component of the universe, which ensures his vital activity through the use of natural resource potential (Mohajan, 2018).

The problem of the interaction of society and nature is an important direction of scientific studies aimed at solving the complex processes of the nature development and its components, nature resource management at the planetary and regional levels. Nature and society function according to their own laws, which are fundamentally different from each other. It is about natural and social laws that natural and social sciences study with the help of different concepts, units of measurement, etc. (Andrushchenko, et al., 2019).

A retrospective analysis of the dynamics of the interrelationship between society and natural resources shows that the human attitude to the benefits of nature has been based on needs. These are the most important components that, as a rule, determine the pace and degree of involvement in the cycle of natural resources. Unfortunately, the society's requirements are ahead of the restorative properties of nature. In addition, some types of animal and plant life, some types of non-renewable minerals are quickly disappearing forever. Those needs that in the era of consumption often stay above the level of their satisfaction are growing. This creates a certain tension that becomes both an engine of economic growth and a cause of dissatisfaction with the status quo (Dawson, 2022).

It is possible to optimize the interrelationship between society and natural resources by limiting consumption. Another option is to limit population growth. However, as our research proves, none of the above-mentioned ways of limiting consumption can be objectively used in the current conditions, forasmuch as their implementation requires the awareness of society that nature of the current interrelationship between a human and nature will lead to the death of all living things on the earth (Berghöfer et al., 2022).

The way out of the problem outlined requires unified, consolidated and balanced actions of all countries, all inhabitants of the earth, aimed at stopping the barbaric destruction of the world's natural resources. It is about acting together to stop the debilitating and destructive development that is seen as the greatest good in many countries nowadays (Coscieme, 2020).

The tendencies and contradictions that have developed in the world economy testify to the need for the formation of a new social-economic system that must meet the challenges of modern times, in particular, regarding the elimination of various forms of inequality, the development of the middle class, and access to raw materials (Ducarme et al., 2020).

Studies reveal that developed countries often create destructive interrelationships between society and natural resources. In order to further accelerate development, they not only consume the lion's share of the entire natural resource potential, but also cause damage to the environment, artificially inhibit the development of other countries, which, despite the wealth of natural resources, have been in the group of underdeveloped countries for decades (Harrison et al., 2018).

Currently, more than ever, there is an urgent need to change the format of progress of highly developed countries, which largely depends on ensuring the harmonization of interrelations between a human and nature. The new paradigm of economic development primarily represents a transition from the predominantly sluggish market self-organization of the economy to its development, which is based on strengthening the fundamentals and gives rise to a new type of economic growth. Increment of growth as the main indicator of progress nowadays and in the distant future needs to be evaluated taking into account the scale of use, preservation, restoration and protection of the natural component (Himes & Muraca, 2018).

Studying the ways of developing a new way of thinking, a new attitude towards a person and his environment, solving global problems of humanity is important both in a practical and theoretical sense. In this context, the social-ecological methodology offers a rational approach to the quantitative measurement of interrelationships in the "society – nature" system (Jones & Tobin, 2018).

Material and energy information exchange takes place between nature and society, forasmuch as it occurs within the subsystems. However, the driving forces behind this exchange are different. While natural forces act in the "nature" subsystem, then social-economic forces act in the "society" subsystem. Their interaction creates a complex system of social-ecological and economic interrelationships. Direct and feedback connections of these two subsystems are implemented directly through a person, his biological links with nature, and through social, socially mediated links – through human production activity. A human is not only a natural, but also a social-natural being that combines inorganic and organic forms of movement (Cundill et al., 2017).

## 6 Conclusions

Therefore, as evidenced by the analysis of scientific literature on the research topic and the questionnaire results, the modern scientific community is aware of the necessity to develop and implement a model of "partner" dialogue based on the establishment of a harmonious coexistence of a human and nature. Such a model should promote the dialogue between individual cultures and integrative-synergistic scientific, educational and enlightenment-based directions regarding the value dimension of the natural environment.

Excessive and often ineffective human intervention in nature, inefficient use of existing natural resource potentials lead to their destruction.

Optimizing the interrelationship between nature and society requires compilation and the determination of a specific action plan within each country, region to ensure development without additional involvement of land, forest, water, etc. resources. Building new relations between society and nature becomes possible thanks to the inventory of natural resources, their redistribution between new owners, the introduction of the latest technologies, the introduction of scientific and technical achievements into the reproduction process.

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