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**Study of Man in the Light of a Systems Approach
Man and Natural Science**

Abstract

Currently, the development of scientific knowledge and practice highlights the need to connect research problems with human issues. The presence of internal integral trends in the development of knowledge and interdisciplinary research has a significant impact on the development of scientific knowledge, connecting it with the individual's research tasks and cognitive abilities. The complex, systemic nature and internal connections of humans present humans as subjects of natural science. This perspective is a natural outcome based on deep practical, methodological, and ideological foundations. For the humanities, the artistic understanding of humans has always been a direct subject of study. For the natural sciences, this focus began only in the second half of the twentieth century. This article, therefore, attempts to study some ideological and methodological prerequisites for the reorientation of the cognitive strategy of natural science. In doing so, it identifies a new path open to humanity.

Keywords: *Human, natural science, system, cognitive strategy, life activity, humanities, reorientation, artistic knowledge, science*

Sistem Yaklaşımı Işığında İnsanın İncelenmesi İnsan ve Doğa Bilimi

Öz

Günümüzde bilimsel bilgi ve uygulamaların gelişimi, araştırma sorunlarının insani meselelerle ilişkilendirilmesi ihtiyacını vurgulamaktadır. Bilginin ve disiplinler arası araştırmanın gelişiminde içsel bütünsel eğilimlerin varlığı, bilimsel bilginin gelişimi üzerinde önemli bir etkiye sahiptir ve bunu bireyin araştırma görevleri ve bilişsel yetenekleriyle ilişkilendirir. İnsanların karmaşık, sistemik doğası ve içsel bağlantıları, insanları doğa biliminin öznelere olarak sunmaktadır. Bu bakış açısı derin pratik, metodolojik ve ideolojik temellere dayanan doğal bir sonuçtur. Beşeri bilimler için, insanların sanatsal anlayışı her zaman doğrudan bir çalışma konusu olmuştur. Doğa bilimleri içinse bu odaklanma ancak yirminci yüzyılın ikinci yarısında başlamıştır. Dolayısıyla bu makale, doğa bilimlerinin bilişsel stratejisinin yeniden yönlendirilmesi için bazı ideolojik ve metodolojik önkoşulları incelemeye çalışmaktadır. Bunu yaparken, insanlığa açık yeni bir yol tanımlamaktadır.

Anahtar Kelimeler: İnsan, doğa bilimi, sistem, bilişsel strateji, yaşam etkinliği, beşeri bilimler, yeniden yönlendirme, sanatsal bilgi, bilim

Introduction

Currently, the development of scientific knowledge and practice indicates the need to connect the research problems with the human problems. The presence of internal integrative tendencies in development significantly impacts the development of scientific knowledge, connecting it with the research task, the problem of humans themselves as subjects of natural science. This position has practical, methodological and ideological grounds.

That is why this article attempts to study some ideological and methodological reorientation of the cognitive strategy of natural science. The uniqueness of man lies in the fact that he embodies the unity of the laws of nature and society. At the same time, human life is a kind of single, holistic formation, since a person lives, knows and acts as an indivisible whole. The most common basis for promoting the problem of man into the category of the most pressing tasks of scientific research is the unfolding and ever-accelerating process of the scientific and technological revolution. Human practice is acquiring a global character in ever more tangible forms. The threat of nuclear self-destruction of humanity and the driving ecological crisis force us to recognize the correctness of the founder of perfect globalism, V. I. Vernadsky, that “man must ... think and act in the planetary aspect.” Even now, his doctrine of the noosphere as some kind of new seems less obvious to many qualitative state of the biosphere, in which humanity with its comprehensively developed scientific thought will play a diminishing role (Vernadsky, 1974).

- 1) V. I. Vernadsky used the concept of noosphere in these senses. As the case of the planets when man is considered as a geological force with great transforming power;
- 2) as a field of active manifestation of scientific thought;
- 3) as the main factor of reconstruction and change of the biosphere.

V. I. Vernadsky perceives the noosphere as a new qualitative phase that radically changes the nature of the biosphere and man. The formation of the noosphere reflects the unity of nature and society. Just as the existence of man depends on nature, the existence of anthropogenically affected nature is no longer possible without the purposeful activity of man (Lebedeva, 2006).

The noosphere is a state of mind that optimally corresponds to objective necessity, has a systemic completeness, the highest stage of its actual development, characterized by optimal compliance with its role in the universe. The noosphere in the narrow sense of this term is the field of the actual manifestation of the generic human essence, its historical expression in the concrete and unique existence of people (Hegel, 2014). It is also important to study the relationship between the ideas of the noosphere and the sustainable development that is relevant in our time. It is known that the concept of sustainable development combines social, economic and environmental characteristics into a whole. Implementation of sustainable development is aimed at creating normal conditions for the life of future generations. It is development that enables stable economic growth and prevents degrading changes in the natural environment. The concept of noosphere covers wider directions than the concept of sustainable development. In order to implement the concept of sustainable development, it is necessary to define political, economic, ideological, medical-biological, socio-cultural mechanisms in order to ensure this process (Marx and Engel, T.Z, p. Z; T.26, p.115, T.42). The science of the noosphere is based on some general considerations (principles), which V. I. Vernadsky preferred to call empirical generalizations. The first among them is the principle of integrity, unity of humanity, to whose recognition of humanity it was a long and difficult path. We note that the dialectical view of nature defines the basis of the principle of integrity.

The second principle underlying the concept of the noosphere is the principle of unity, integrity of humanity and biosphere, and, therefore, unity, interdependence of evolution and apparently historically changing (Ruzavin, 2013). Another scientist, G.S. Smirnov, presents the noosphere as a supersystem that encompasses human existence in natural-planetary and cosmic existence, and is open to cosmic and planetary influences, in order to emphasize the super-complexity of noospheric reality. To describe such a supersystem, it is necessary to use not only scientific, but also philosophical and religious positions, as well as artistic and figurative understanding of reality. G.S. Smirnov concluded his study of the reality of the noosphere and

wrote: "The noosphere is a fundamentally open and self-preserving supersystem that has a planetary-space implementation and a cosmoplanet."

If we consider the noospheric society as a system, it is logical to think that it is the noospheric consciousness that defines the whole system of noospheric society - the property that creates the system, the relationship that forms the structure, and the element of the substrate. G. S. Smirnov considered the formation of noospheric consciousness to be the main manifestation of noospheric reality. Noospheric consciousness is the real unity of ecological global universal cultural consciousness of civilized humanity. Noosphere consciousness is formed as optimization and harmonization of medical and social, natural and artificial, biosphere and technosphere, spiritual and material levels. It performs an important function of self-organization of the noosphere, acts as the basis for determining the future of human civilization. Noospheric is a global planetary consciousness that unites people regardless of national, class, economic and cultural differences.

With this fact, V.I. Vernadsky makes an important empirical generalization: "with the entry of geological time, the power of identifying inert matter in the biosphere increases, its significance in it and its impact on the inert matter of the biosphere increases." From here we can conclude that the development of the historical process also increases the influence of humanity the biosphere itself. The importance of man in the biosphere is increasing, and so is the influence of man himself in the biosphere. V.I. Vernadsky notes the inextricable connection between the formation of the biosphere and the development of science and scientific thought. The material and technical power of man is primarily associated with the development of science and scientific thought. The question of determining the goals for the development of science and productive technology contributes to the establishment of goals for the development of man himself. "Man is a mystery. It needs to be solved. It is necessary to know a person in all his totality, aspects of the manifestation of life activity. This must be known in order to establish the nature of its development in relation to nature (Nicolai, 2016; Oldfield & Shaw, 2006). Man, like any creature, is an open system, and therefore one can judge the essence by existence, although the idea of it, due to the specific conditionality, uniqueness of the existence of individual carriers of a given generic essence, will never be unambiguous, exhaustive. The essence of man, humanity, reason is one, and existence is concrete, unique and infinitely diverse due to the unique diversity of conditions for the manifestation of the generic essence, although limited specifics of manifestation. Man self-realizes in accordance with his human generic essence on the basis of his bodily organization and society in its historical development, i.e. within certain objective frameworks that determine the properties in which the human essence

manifests itself; Currently, the boundaries, the foundations of human activity, human existence, the need to comprehend the granite foundations of human existence are being trenched. In connection with the above, the truth is revealed that “scientific knowledge is a form of human activity, conditioned not only (and even not so much) by the logic-technological norms” of knowledge production “but also mainly by the norms of the socio-historical existence of people and cultural practice”

The modern era requires a special attitude towards the significance of scientific activity and science in general, and its methods. Modern society is unthinkable without the development of science and their practical achievements. The goal of science is to reveal the laws of nature and establish human dominance. These ideological and epistemological attitudes can be associated with the name of F. Bacon, which was firmly established in the science of the New Age and received philosophical confirmation from Fichte, and also became widespread in the 19-20 centuries in positivist philosophy. And further it finds a vivid expression in the aphorism: “we cannot expect mercy from nature; taking them from her is our task” (I. Michurin). Subsequently, Hegel's ideas about mechanism, chemistry and the organism are associated with a simple statement of the fact about the existence of natural phenomena, formed-movement, molecular atomic movement, life. According to the knowledge of nature. Hegel, exploring the possibilities of mechanism and limitations, chemistry, theology as methods of cognition of nature, writes that “Mechanism manifests itself as a desire for wholeness in that it tries to understand nature in itself, as something whole, which does not require anything else for its concept - wholeness , which is not in the goal and in the whole world mind associated with it” Hence, it is necessary to emphasize the similarity between the modern idea of the noosphere, since it assumes the implementation of the identity of theoretical and practical ideas. The process of cognition and reality itself are practically balanced.

Practical human activity is carried out in and through industry. Thus, it turns out to be the target that mechanical and chemical technology offers itself. At one time, C. Marche noted that “mechanics itself, which in the century to a certain extent reached its completion. Only in the century did science begin to develop: chemistry, geology, physiology, which presented new heights of development of production and human freedom” (Ismayilov & Khudiyeva, 2023). The situation that humanity faced was forced to put forward a demand to practice and science to change or disappear. The increase in anthropotechnological impact on the biosphere has shown the amazing paucity of “our knowledge about the forms and levels” of its organization, about the systems and mechanisms of its self-regulation, organization, about the criteria and its various parameters, its unstable and sustainable behavior. The idea of building global models

for the functioning of the biosphere showed the very direct complexity of this global problem, requiring the inclusion in the work of the widest range of natural and humanities disciplines. Secondly, there is a serious insufficiency for the set goals, ranging from physics to economics. The problem of man, his existence, and his goals directly depend on fundamental discoveries. Therefore, everything that has been said pushes natural science to work previously considered unimportant. K. Marx about the deep essence of science and natural science is relevant here.

“Man is the direct subject of natural science... wrote. K. Marx - And nature is the direct subject of science about man,” but man is in an organic connection with nature, as a naturally occurring biogenic being. It follows from this that only natural science can fulfill the task of knowing man; learning the secrets of life turns out to be the subject of all natural science (Ismaylo, Mukhamadli i Khudîêva, 2022). At one time, Teilharde Chardin argued that “true physics is the one that will ever be able to include a comprehensive person in a complete picture of the world. Note that indeed the inclusion of man in physics and chemistry occurs as a result of the doom of these sciences to the goals of human practice. From the point of view of S.S. Schwartz, the task of determining ways to resolve the contradiction between the very interests of human development and the state of the biosphere that was presented to it is becoming increasingly relevant. 1) minimizing the harmful trends of industry and a lot of development of nature; 2) development of a system of measures that ensures the normal existence of the biosphere. From his point of view, this is possible if a normal strategy is developed, which should be “based on a clear understanding of the laws of development of the living surface of the Earth” Therefore, basic research of a biochemical nature, geophysical, biogeochemical, thermodynamic should be oriented and related to this goal (Simpson, 1979).

Conclusion

Modern society, formed under the influence of technogenic culture, is experiencing a global crisis that requires a comprehensive and targeted solution. Humanity now faces an alternative: either maintain the existing type of activity or perish in an environmental disaster, or radically change it - and thereby solve global problems, preserving the planet for the life of subsequent generations. Since the second option is the only acceptable one, humanity will have to transform, on the basis of awareness of new realities, not only the predominantly destructive type of activity that has formed, but also its worldview and the entire value system. The emergence of global problems of our time, and in particular (Ismaylo, Mukhamadli i Khudîêva, 2022) environmental problems, forces countries around the world to move to a strategy of consciously regulated development. It is under these conditions that the ideals and values of noospheric teaching acquire particular importance. The unflagging interest in the doctrine of

the noosphere once again confirms the depth of the ideas of its creators and serves as a solid foundation in the development of various branches of scientific knowledge (Ismayilov & Khudiyeva, 2022). First of all, it is necessary to change a person's consciousness. Changes in consciousness bring changes in actions. This can be achieved by cultivating environmental responsibility in a person, increasing spirituality and improving morally. Transformation of consciousness and acquisition of spirituality will help people save the Planet. Therefore, a decisive role in harmonizing the relationship between nature and society must be played by education, school, and a teacher who introduces the child to the world of Nature and Culture. A noospheric (spiritualized) person is aware of the highest responsibility for his actions and thoughts before modern society, nature, and future generations, and is aware of his inextricable unity with all humanity, nature, and the Cosmos.

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