



CULTURE, SCIENCE AND PHILOSOPHY OF KNOWLEDGE

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<p>Received: 26th February 2024 Accepted: 11th March 2024</p>	<p>The purpose of this scientific research is to identify the complex phenomenon of science as an axiological and humanistic phenomenon, which is a producer of the culture and consciousness of humanity. The relevance of the study is because the authors reveal science as a complex cultural phenomenon. Its historically determined task is the evolution of value orientations and transformations in the context of the commercialization of modern science. In this regard, this article is aimed at identifying or disclosing pressing problems in an unstable globalizing world, where many issues are resolved by the dominant technogenic consciousness of modern society, dictating its laws and guidelines through the prism of exceptional profits, benefits and consumer sustainability. The leading approach (or method) to the study of this problem is a systematic approach, which allows us to comprehensively consider structural-functional, methodological, and chronological problems in the context of feedback theory, helping to identify an objective picture of the task at hand. The article presents an analysis of the philosophy of science in the second half of the twentieth century. and the beginning of the 21st century. marked a fundamental change in the study of reality. In the process of cognition, new philosophical ideas, new methodological approaches, scientific concepts, etc. emerged, different from the previous ones. In epistemological terms, for adequate cognition from the standpoint of modern epistemology, new concepts are formed (complexity, self-organization, chaos, etc.), and at the same time, some concepts (randomness, uncertainty, chaos, etc.) are interpreted in the light of new ontological approaches. Research shows, oddly enough, that we live in a complex, nonlinear world, with all its laws and ensuing consequences. The chronological continuity and paradigms are revealed to reveal the pattern of science as a cultural phenomenon. It is also substantiated that the formation of science, and its cognitive apparatus begins with disciplinary sciences, when each science studies a certain fragment of objective reality. By this, scientific concepts, principles, hypotheses, and theories are formed that are characteristic of a given science and constitute its fundamental basis. Of course, it can also be noted that in the history of science, "examples of the use of the cognitive apparatus of one science by another are found in the era of Ancient Greece, the union of philosophy and medicine Pythagoras and Empedocles were equally great philosophers and great doctors" [1.P.193] History of science in medieval Central Asia - Beruni, Ibn Sino - also using the cognitive apparatus of one science in the research of another science they obtained, discovered new qualities, properties of the objects under study (geodesy). The materials of the article are of practical importance in the concept of the complex and multifaceted nature of the philosophy of science as a cultural phenomenon.</p>

Keywords: philosophy, methodology, axiology, culture, science, continuity, system, system, ideology, development, interdisciplinarity.

INTRODUCTION

Fundamentally new conditions, which are a direct consequence of globalization, significantly influence the

situation of culture and science, require the study of these conditions and their theoretical understanding. Taking into account the above, in this complex,



multilateral and rapid-paced process, we can first identify several main features that have emerged precisely over the past decades under the determining influence of the accelerated pace of development, science and technology. This is, firstly, a kind of enrichment and change in the conceptual apparatus of many areas, for example in philosophy - complexity, randomness, unpredictability, bifurcation, attractor, fluctuation, etc.; secondly, the integration of interdisciplinary sciences (bioethics, biochemistry, bioaesthetics); thirdly, the stratification or self-differentiation of languages depending on their role and place in the modern era. This change is scientifically justified because science, engineering and technology have one basis, one object of study, -nature, society and man. The more and further a person delves into the world of nature, society and man, the more ramified the sciences become. If at the same time, we try to create an entire set of scientific, technical and technological terms, concepts, categories, etc. in every national language, it is not difficult to guess that humanity will eventually slow down its development. Therefore, it seems most reasonable to create the entire diversity of national systems of scientific, technical and technological terms, concepts and categories mainly in international languages, while giving complete freedom to other national languages to determine the boundaries and limits of borrowing and creating modern terminologies.

All this is a phenomenon of modern culture. This is because in the 21st century, there is not only a reevaluation of the forms of social consciousness, but also their internal mechanism is changing. Science and culture are undergoing great changes in structure and content. They have always developed in parallel, influencing each other, in the knowledge and understanding of human life and nature. Since the era of the Muslim Renaissance, scientific thinking has absorbed the achievements of the exact sciences and criteria of truth associated with the real existence of nature, society and man. Science increasingly expanded its horizons of knowledge, explaining the world, helping people, and shaking dogmatic religious ideas.

METHODS AND METHODOLOGY

The period of development of free market relations brought material and technical factors to the forefront, in the interests of enrichment, discarding spiritual and psychological factors for a long time and completely. Market relations saw and saw in a person, first of all, a performer, a means of generating profit for the employer, while the performer saw in the production process itself the only way to provide himself with vital necessities. These relations, brought to a high degree of intensity and intensity in the context of globalization, in the second half of the 20th and early 21st centuries

caused the dominance of technogenic consciousness in places. L.M. Karpov is right in his statement: "The humanities turn out to be unclaimed in a society where the values of profitability, efficiency, competition, etc. become priorities. The very nature of these sciences is such that they manifest their impact on society, their usefulness not directly, but indirectly, and, above all, through the education system" [2.P.193]

Here it is appropriate to note the words of E.V. Ilyenkov: "We value and respect our own science little, its theoretical wealth, its specific role in the development of knowledge, its methods of analysis, its historically developed arsenal of concepts. Therefore, we often propagate the absurd idea that philosophy is good when it trails behind natural science, assents to all the statements of authoritative natural scientists, and we call this assent a generalization of the successes of natural science" [3. P.366]. Continuing his thoughts, E.V. Ilyenkov notes: "As long as we look at philosophy as a handmaiden of natural science, and not as an equal comrade of natural science, there will be no respect for it on the part of natural scientists" [3. P.367]. The same concept is put forward by E. Agazzi: " Here again we see negative feedback: as soon as we recognize that science must be defined in a general sense as reliable knowledge, and we see in objectivity and rigour the necessary signs of scientific knowledge, we have to recognize that the original identification of science with the natural science model is too narrow and that this limited model must be changed. This is the very essence of the debate between the natural and social sciences, which we have already mentioned. ... " [4. P.58-67]. Several concepts of the problem of philosophy, culture and science are associated with the names of G. Haken, I. Prigogine, E. Moren, Maturana, Varela, and E.N. Knyazeva. For example, I. Prigogine interprets the phenomenon of complexity as a phenomenon of unstable systems. K. Mainzer reveals the phenomenon of complexity as complex systems thinking. Scientist believes that the modern world is becoming more and more complex and to carry out effective activities a person needs to develop complex thinking. In the book descriptions of M. Roger Lewiny's *Complexity: Chaos at the Edge of Life* and M. Mitchell Waldrop's *Complexity: The Manifestation of Order and Chaos in Science*, complexity is seen as the limit of chaos. As a result of the study of this problem in philosophy, several concepts were formed, such as the theory of self-organization (G. Haken), the theory of dissipative structures (I. Prigogine), the complexity paradigm (E. Morin), the concept of autopoiesis (U. Maturana, F. Varela); N. Wiener was the first to apply an interdisciplinary approach in the history of science. The scientist substantiated the positive feedback between living and non-living nature, thereby determining their importance in the theories of synergetics and complex



systems, etc. [5. P.43]. Along with world scientists, the problems of modern philosophy are developed by such scientists of domestic philosophy as M. Abdullayeva - synergetics, complex thinking, randomness, complexity, transdisciplinary method; G. Zhalolova – epistemology, interdisciplinarity, chaos and order; M. Niyazimbetova – fractal, system, attractor, autopoiesis [5].

According to E. Agazzi: " A special feature of modern science (prepared by the development of science in the 19th century) is that its direct the object is no longer Nature, but a thick layer of mediations, gradually accumulated by science itself in the course of building models and developing complex theories with the help of increasingly sophisticated and " artificial " technologies " [6. P.46-47]. This change is scientifically justified because science, engineering and technology have one basis, one object of study, -nature, society and man. The more and further a person delves into the world of nature, society and man, the more ramified the sciences become.

RESULTS

Globalization, bringing peoples and continents together at an accelerated pace, creates in the minds of people of all nationalities and increasingly consolidates a sense of unity, mutual cohesion and common destinies. In people of all nationalities, the understanding gradually arises and becomes more and more established that the Earth is their only abode and that their life and happiness depend on how they manifest themselves as its masters and inhabitants. Naturally, in these conditions, every year more and more global and regional economic, political, legal, cultural, educational and other organizations, associations, etc. are created. This allows us to have a fairly clear and visual picture of the state of the world economy, its economy, political life and culture.

According to E. Agazzi: " The specific subject of interest for methodology is cognition, knowledge, and we have seen that its close connection with science is in no way accidental: it accompanied the evolution of the very concept of science. It is for this reason that the rapid growth of methodology in the last century has been fueled by the introduction and development of new methods both in philosophy and in some special disciplines, based on very fruitful feedback. For example, the typically philosophical concept of definition was significantly enriched by the introduction of recursive definitions and definitions through axioms (or axiomatic definitions) in mathematics and mathematical logic. The latter, in particular, had a direct influence on semiotics and the philosophy of language, giving the prototype to the concept of syntactic meaning and the doctrine of semantic holism. A counterexample would be the fact that the theory of evolution and scientific cosmology can only be logically justified by

introducing criteria borrowed from the historical method, in addition to the usual criteria of the physical sciences. In short, the rich harvest of results obtained within the framework of individual methods of thinking (which we could roughly and in the traditional spirit designate as phenomenological, semiotic, axiomatic, deductive, reductive, hermeneutic, transcendental, and historical) constitutes the body of truly philosophical knowledge, and indicating to it, we can answer the oft-repeated complaint that we live in a period of philosophical decline because we do not have "great thinkers" capable of creating "great systems" of thought " [7. P.60-66].

"Any complex activity, especially human-dimensional, turns out to be not goal-oriented, but value-dependent, and appears not as a vector, but as a cyclical movement, which is maintained by the continuous balancing of many forces, vectors, opportunities, influences, aspirations. This is finding and maintaining a measure, harmonious coordination, coherence of activity not only with planned results and available resources, but also with values, and with the motivation of the subjects of action, and with truth, and with benefit, and with the past, and with the future, and with everything available life plan" [8. P.151]

ABOUT DISCUSSION

Based on general findings, transdisciplinarity can be characterized as "a research strategy that crosses disciplinary boundaries and develops a holistic vision" [1. P.112]. Transdisciplinarity involves, in a process with high moral and ethical standards, developing a holistic vision of the world, but the ability to see a universal property in complexity. The synthesis of acquired knowledge, through various educational processes, imparts integrity to a person's ideological position, replenishing human capital. In the golden age of Islam (V - XIII centuries AD), Muslim scientists made a great contribution to the development of astronomy, mathematics, philosophy, medicine, geography, chemistry, architecture, and poetry. It was a time of creative spirit in all spheres of culture. The familiarization of scientists of this period with the scientific heritage of the ancient Greeks, Persians, and Indians, together with the above facts, creates new opportunities for the development of science. As Agazzi notes: "... human knowledge never begins from scratch, and successively acquired elements of knowledge are "inserted" into already acquired knowledge and tend to strengthen it. ... This does not mean a return to the Cartesian or Baconian warning against the risk of becoming prisoners of preconceived prejudices, since it turns out that such prejudices are not something that we should get rid of, but that is a precondition for our knowledge of the world [4. P.58-67]. Many of the scientific naturalists of the Muslim East were



encyclopedists and simultaneously conducted research in various fields of science. With their scientific achievements and ideas, they had a great influence on the development of world civilization. Such fundamental discoveries of this period as the algebra of al-Khorezmi, the astronomy of al-Fergani, the encyclopedist al-Beruni, Ibn Sina, Farabi and others, as representatives of the classical science of Central Asia, deeply and their fundamental study will help to understand the importance of culture, knowledge of languages, communication with the scientific community in the development of a scientist. This was not the autonomy of science, as E. Agazzi asserts: "The new time - understood historically, as what happened in the West with the dispersion of the twilight of the Middle Ages - was characterized by the formation of "autonomy" of different areas of the spiritual and practical life of man. Thus, Machiavelli demanded the autonomy of politics, Galileo - the autonomy of science, the British representatives of liberal thought - the autonomy of economics, Kant and romanticism - the autonomy of art" [9. C.6]. On the contrary, the medieval East gave great impetus and impetus to the development of world science, and at the same time the integration of culture. The Arabic language of the Middle Ages, as an international language, became the language of science and creativity. It embodied intelligence, observation, the ability to analyze the external world, to express all the richness of a person's inner world, and the entire amplitude of his thoughts, ranging from deep philosophical generalizations to masterpieces of wit and verbal resourcefulness. This vocabulary and mental wealth developed gradually historically over the centuries when life primarily needed a subsistence economy and when science was the lot of dedicated and materially privileged layers of the population.

Islamic culture has influenced literature, art, science, philosophy, ethics, customs and education. Islam strengthened the mutual mysterious connection between different regions and peoples and strengthened and enriched the cultural wealth and traditions of the peoples of the great province. The rich cultural traditions of the peoples of Central Asia had a great influence on the development of Muslim culture not only locally, but also in other regions. As M. Nuritdinov notes: "Since Arab-Muslim philosophy is a unique scientific and philosophical phenomenon, this direction has countless facets. ... It must be borne in mind that it would be, to put it mildly, incorrect to consider the philosophy created from the first philosophical views that appeared in Arabic in the Islamic region until today, without the philosophy of "Kalam". The term "Kalam" in a broad sense refers to any discussion, conversation, contemplation and observation on religious and philosophical topics in the Muslim literature of the Middle Ages." [10. P.15]

CONCLUSIONS

Culture is a complex social phenomenon consisting of subsystems. The development of science in a particular country is associated with existing and functioning socio-cultural and economic factors. Science, as an element of culture, influences culture. I. Prigogine notes that science is, in a sense, an ideology - after all, it is rooted in culture. And it is therefore not surprising that new questions that infuse fresh energy into science often come from traditions of farewell, rooted in completely different cultures. The fact that today a variety of cultural formations take part in the development of scientific culture is a source of new hope for us [11. P.49]. Along with this, they have an important role as a value in human cognitive activity. Thus, Newton wrote, "Our values have the power of emotional attraction. We attract into our orbit those whose values coincide with ours, and instinctively push away, like the other pole of a magnet, those whose values contradict ours" [12. P.69]. Culture as a multilayered and complex phenomenon, and science as the leader of culture, historically took shape as a combination of integration of many spheres of human life. Science is a child and creation of the people. It embodies his intelligence, observation, and ability to analyze the external world, to express all the richness of a person's inner world, and the entire amplitude of his thoughts, ranging from deep philosophical generalizations to masterpieces of wit and verbal resourcefulness. This wealth developed gradually historically over the centuries when life was based mainly and mainly on subsistence farming when science, technology and technology were the dedicated and materially privileged layers of the population.

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LINKS

1. Князева Е.Н. Трансдисциплинарное стратегии исследований // Вестник ТГПУ, 2011. №10;
2. <https://www.dissercat.com/content/vzaimodeistvi-e-kognitivnykh-i-sotsialnykh-faktorov-razvitiya-sotsialno-gumanitarnykh-nauk>. Л.М.Карпова. Омский государственный педагогический университет. Социально-гуманитарные науки в обществе потребления. Время обращения 01.05.2024;



3. Э.В.Ильенков. Философия и культура. Москва. Политиздат. 1991;
4. Агацци Э. Эпистемология и социальное: петля обратной связи. Вопросы философии. 2010. №7;
5. Замонавий фалсафий атамаларнинг изоҳли луғати // Мирзо Улуғбек номидаги Ўзбекистон миллий университети Фалсафа илмий жамоаси. – Тошкент: «Университет», 2018;
6. Агацци Э. Переосмысление философии науки сегодня. Вопросы философии, 2009. № 1;
7. Агацци Э. Методологический поворот в философии. Вопросы философии. 2014, №9;
8. Мамченко А.А., Дзятковская Е.Н. Трансдисциплинарность как преодоление границ. Москва. Институт Философии. 2016;
9. Агацци Э. Моральное измерение науки и техники. Перевод с английского И.Борисовой. Москва. Московский философский фонд. 1998;
10. Нуритдинов М.Н. «XVI-XVII асрлар Мовароаннаҳр фалсафаси».– Тошкент, « Info Capital Books». 2016;
11. И.Пригожин. Философия нестабильности. «Вопросы философии». 1990, №6;
12. Мэнсон. Все хреново. Москва, 2019;
13. Г.Махмудова. От образования к мировоззрению: ценностная ориентация молодежи. Журнал Miasto Przyszłości Польша Vol 32, 2023. P179-184. <https://miastoprzyszlosci.com.pl/index.php/mp/article/view/1124/1038>;
14. Г.Махмудова. Современные критерии и методология эстетики. Educational Research in Universal Sciences "ERUS". Май 2023. P.618-625;
15. Г.Махмудова. Эстетика как гносеология искусства Восточного Возрождения. Том 4 № 1 (2023): Марказий Осиё Ренессанси журнали. Б.15-23. <https://tadqiqot.uz/index.php/renaissance/article/view/7429>.