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RESEARCH ARTICLE

INTERACTION OF OBJECT, SUBJECT AND SYNERGETIC CATEGORIES IN SCIENTIFIC WORK

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Abstract

This article is about one of the most fundamental categories of philosophy, the object and the subject, and focuses on its place and role in scientific research. The objective of the research activity is the object in the broadest sense of reality. The researcher acts as a subject, whether it is an individual or a specific community (creative team). Synergetics has gained the status of a philosophical category as a branch of science and is important in the study of significant changes in the universe.

Introduction:-

In the system of philosophical categories, which are forms of thinking in scientific work, the relationship of object and subject is always distinguished by its relevance. In this regard, our scientists, Davronov Z, Kurbanova L.A. from Russian and European scientists Kara-Murza SG, Slavgorodskaya LK, Kokhanovsky VI, Hegel GV such as the researches of famous philosophers.

Nowadays, the complexity of the object-subject relationship, which is one of the main components of the creative process, the inability of the researcher to conduct research on pure objects in the study of micro-objects, the scientist can use technical means to study them.

Main Part

Understanding and noting the importance of the subjective aspect in cognition is a characteristic feature of dialectical concepts. For example, "The richest thing is the most definite and the most subjective ...", says Hegel. In dialectics, given the close interdependence of the objective and the subjective, and the extent to which the subjective is compatible with the opposite-objective, we understand why the subjective is so important. It is characteristic of creative thinking to understand the delicate interrelationships of these two contradictions and to reject the old views about the insignificance of the subject. For example, Z. Davronov admits that "the subject, acting on the basis of evidence in the research process, has a practical, emotional, material impact on the object, changes it."

Nevertheless, many researchers believe that subjectivity is unnecessary, erroneous, and needs to be eliminated. Such an approach can be found, for example, in science. "You can understand why the proponents of the scoring system are fighting so hard to get rid of their 'objectivity,'" he said. Kara-Murza. - In most of their speeches, the concept of "subjective" is synonymous with the words "mistake", "evil". There is no evidence in favor of this. However, we know many areas of activity in which subjective systems of assessment are used. These systems meet our requirements, where the difference between the grades given by knowledgeable and impartial judges is not so great (for example, in figure skating or gymnastics arbitration). The fact that the word "objective" is often used in

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everyday language to mean "objective" does not serve to justify the above-mentioned terminological misunderstanding. "

The complexity of the object-subject relationship, which is an important aspect of the creative process today, the inability of the researcher to conduct research on objects in a pure state in the study of micro-objects, the use of technical means to study them. Since creation always belongs to the subject, its content (as well as its form) is not determined only by the object. It is true that the content of a scientist's work depends to some extent on his worldview, social status, intellectual ability and character. For example, if we look at the evidence (one of the processes inherent in scientific creation), the selected evidence depends on the individual's worldview and intellectual competence, the direction of the evidence - his social status, level of substantiation, depth, intellectual ability. we see that it depends on the character.

There has been a lot of debate in scientific texts about the existence of subjectivity and individuality. In particular, LV Slavgorodskaya notes: "The" traditional "style of language in the text to some extent guarantees the author the ability to communicate with the reader; In order to find such a language in the text, which uses the "new" language style, it is necessary to use additional means to overcome the barrier between the transmitter and the receiver of speech. " In our opinion, in this case, the peculiarity of the researcher's character is more pronounced in the literature than in other circumstances. For example, in their creative work, each researcher relies on his own imperfect and sometimes misleading instincts, intuition, limited and sometimes incorrect knowledge. He is forced to rise above the horizons of creativity, the ladder of subjectivity.

In short, the development of knowledge is not a movement from subjectivity to objectivity, but a movement that is more universal than the relatively limited, subjective-objective systems of knowledge, but by its nature subjective-objective systems of knowledge. Only when the epistemological significance of subjective things is fully understood, and attention is paid to this integral part of the process of cognition, can progress in science take place. It is necessary to work with him in a special system. A certain degree of objectivity of knowledge is provided by a rich subjectivity, which is embodied in a certain result of knowledge. In essence, objectivity means rich subjectivity or rich subjectivity means objectivity. Only by acknowledging this identity of objectivity and subjectivity can one hope to achieve objectivity and truthfulness. After all, an object taken "on its own" without any connection to the subject is absolutely incomprehensible to the subject. In this case, the object is hermetically sealed and is completely separated from the subject "in itself". But a person who knows understands subjective things, probably to the same nature as him. If rich subjectivity is the same as objectivity, then man is capable of understanding objectivity.

Therefore, the following idea, which defines creative thinking in terms of its content, should be recognized as correct: "The diversity and diversity of the role of the subject in the change of knowledge and reality, its means, goals, interests and needs." Therefore, it is difficult to accept the following ideas, even if they are defined in the same dialectical tradition. "The principle of objectivity requires that something be reflected in the subconscious, not to be replaced by anything else, not to include in it something foreign." Thought, acting on the principle of objectivity, should allow the subject of research to express itself, that is, it should be treated in such a way that it does not take its definitions from the outside, but defines itself. In our opinion, the masses seem reasonable, but given the inseparability of objectivity and subjectivity, is it possible to meet these requirements? Is it possible to achieve pure objectivity in knowledge? Is it possible for an object to define itself without receiving its own definitions from "outside", that is, from those who know it? Are we able to include "things" in the subject we know? Is the goal set in the methodology realistic? Aren't the requirements beyond the traditional objective approach excessive?

So, in our opinion, if we want to remain on the basis of realism, we must find the usual, superficial objective requirement inappropriate. Challenges such as "Be objective", "Do not allow subjectivity", "Do not include your feelings and passions in the thoughts about the object" do not help.

This "methodological approach" is in some cases inappropriate for the following reasons. As a rule, the researcher knows and acknowledges the necessity and importance of the requirement of objectivity, even without someone's guidance, but this does not always save him from subjectivity. It is not a matter of returning what is known to everyone. Summarizing the above considerations, we conclude as follows:

The creative process is an important factor in determining the intellectual competence of the researcher as a result of the combination of objectivity and subjectivity. When a researcher studies objective reality in his / her work, he / she takes a creative approach to its assessment and solves the problem objectively in the process of reflecting his / her subjective attitude. There is no one-size-fits-all form of creative thinking for all disciplines, which follows a single rule in science, because new elements are constantly being formed, so this process is always contradictory.

These colorful definitions show that creativity is a complex phenomenon, its scientific and theoretical problems are not yet fully developed. Indeed, it is difficult to explain the artificiality of creation. Creativity is a complex phenomenon that consists of original understanding and interpretation.

Synergetics is not only a science but also a philosophical category. In modern methodology, the formation of the universe is interpreted as the emergence of matter from a singular state or the emergence of matter from the gravitational pull. Although the true nature of this state has not yet been determined, the singular state can be described as the accumulation of an absolutely large mass, an absolutely small point volume.

One of the methods that is currently a key factor in advances in engineering is modeling. This method is also used in all areas of modern science, including mathematics, physics, biology, economics, medicine, ecology and others. Nowadays, as it is known from the development of science, the evolution of things and events in reality is insignificant, and in the evolutionary process of each system, there are many possibilities for development, and they have an irreversible nature.

In connection with this problem, the methods of modern mathematics, for example, nonlinear differential equations, the study of various processes arising from self-organization with the help of nonlinear equations. Even without solving these equations, it is possible to get an idea of qualitatively new features of the process reflected in them. The "disaster theory" is of great importance in the study and modeling of self-organizing systems. In this theory, "the mathematical model of catastrophe shows some general features of the change of external conditions in various events with a sudden change in the state of the system" Disaster theory is a mathematically abstract procedure that reflects the fragmentation of natural social systems. That is, the theory of catastrophe, which is a mathematical method, has a certain degree of commonality in self-organizing systems, and in some cases in the modeling of processes in which jumping is observed.

Mathematical modeling in the process of scientific research in the field of technology shows that one of the important aspects of this process is associated with the emergence of new forms in a nonlinear environment. For example, Mandelbrot's one-dimensional theory is used in the synergistic interpretation of many complex systems. According to this theory, simple mathematical formulas, without determining the location of points in the plane, create geometric objects - fractals, which have an unexpectedly complex structure.

Benoit Mandelbrot said of the fractal definition, "Why is geometry sometimes called cold and dry?" One reason is that he could not describe the clouds, the mountains, or the beach. The cloud is not a sphere, the mountains are not cones, the shore is not a circle, the bark of a tree is not smooth, the flame does not move properly ... In this sense, fractal geometry studies the irregular shapes in the world and brings them into certain geometric shapes - fractals. This theory is important because it means that the mathematical (geometric) model of self-organizing processes in nature has a philosophical basis.

For example, in mythology, the god Dionysus derives from chaos many unpaired forms. The unifying primordial foundation, the god of Appalo, equates them. Similarly, in ancient Hindu mythology, the god Brahma created the world by organizing chaos, while the god Shiva destroyed it. The primordial god Vishna, who stands between them, is the cause of the establishment of the world.

One of the mathematical methods in the modeling of self-organizing systems is related to the theory of topos and the theory of categories. These theories allow the application of synergetic principles. However, synergetic principles allow them to be applied. Also, despite the fact that synergetic principles are rarely used in them, the author F. Gurbanov said that adequate modeling of self-organizing systems is “... In turn, the theory of topos may in the future be a general-abstract mathematical theory of self-organizing structures in living and non-living nature.

Conclusion:-

The categories of object, subject, synergetics play an important role in modeling scientific knowledge. The epistemological possibilities of modern mathematical methods in the adequate modeling of self-organizing processes are great, and it is expedient to apply these methods in a complex way.

The question of the relationship between object and subject plays an important role in any scientific research, in determining the subject of research.

As a result of the interaction of objectivity and subjectivity in the creative process, it plays an important role in determining the intellectual competence of the researcher.

References:-

1. Hegel G.V. Phenomenology of spirit-SP (b) .: Nauka, 1989. -S. 93.
2. Davronov Z. Methodology of scientific creation // Economics and finance. T., 2007. - B. 134.
3. Kara-Murza S.G. Research organization problems. –M .: Nauka, 1991. –S. 172.
4. Kara-Murza S.G. Research organization problems. –M .: Nauka, 1991. –S. 173.
5. Slavgorodskaya L.V. On the issue of the communicative orientation of the scientific text. Functional styles and teaching of foreign languages. -M.: Science, 1992. -P.10.
6. Kokhanovsky V.I. Dialectics against sophistry and eclecticism. -Rostov on-Don .: Phoenix, 1994.- S. 43.
7. Karang: Gurbonova L.A. Ijodiy tafakkurning falsafiy - methodologik tlili: Dis. false. fan. No. ; ЎzRFA “Falsafa va ҳuқuқ institute” –Toshkent, 2007. 77b.
8. Gurbanov F. Methods of researching self-organizing systems. –M .: 1989, p. 46.