



Philosophy of Nanotechnologies on the Way of Forming the Modern Image of the World (Synergetic Analysis)

Hayot Ashirmatov,

Associate Professor of Jizzakh State Pedagogical University, Doctor of Philosophy (PhD)

ABSTRACT

This article discusses the possibilities, effectiveness and development prospects of nanotechnology, which is the most modern research field today, as well as the changes that occur through its development.

Keywords:

Nanotechnology, technocracy, elite, atoms, information technology, nanophilosophy.

Introduction

In the second half of the 20th century, great progress was made in the field of science and technology, and a new stage of industrialization was entered. During this period, micro-electronics developed rapidly. Unique devices were created in all aspects of science and technology and production. In the last decade, the term "nano" has entered our circulation. Just as space travel and the Internet were met with great fanfare in their time, this concept has begun to attract the attention of the media.

Main part

The President of Uzbekistan Shavkat Mirziyoev critically analyzed the state of affairs in the field of "Education and science, implementation of the state's youth policy, introduction of new, modern methods of education, including information and communication technologies"[1; 44]. Based on these considerations, the need for opportunities in the field of nanotechnology in our Republic is greater than ever. Currently, the development of nanotechnology is becoming one of the main priorities of state policy.

Scientific publications of recent years emphasize that now a new scientific landscape of the world is gradually being formed, the basis of which, apparently, will be the field of nanotechnologies, which is being actively promoted as the main innovative paradigm all over the world. The rise of science to such transcendental levels of knowledge of the surrounding world is equivalent to the beginning of the process of mastering the "Deep Cosmos" of mankind. In fact, it represents a fundamental scientific revolution, described by classical dialectics as a leap in the famous law of quantitative change to qualitative change. Such a transformation may represent a decisive break between modern classical science (actually 20th century science) and what will happen to it in the 21st century.

Today's researchers pay special attention to the fact that nanotechnologies open great prospects for the development of medicine, and it is said that this problem affects all mankind. If you believe all these scientific predictions, then the "Golden Age" of mankind will come true in the near future [2;61]. Diseases are not only defeated - they are completely eliminated from human life. Humanity will partially return to

what it was before the time of our biblical ancestors, Adam and Eve. Today, science is making big plans for the near future, and the future of the nanosystem will depend on how effectively it implements these plans.

Currently, it is becoming increasingly clear that the so-called "high technologies", in particular, nanotechnologies, give a significant impetus to the development of civilization. Through the introduction of nanotechnologies, significant improvement of basic quality indicators and increase of the general life expectancy of people, rapid development of new technologies in industry, redistribution of resources, reduction of social tension, extensive development of systems adapted to the environment, such as qualitative changes in the economic and political life of the world occurs, and in this sense the nanoproject has a general civilizational (global) character. Development prospects of nanotechnologies are related not only to the ability to work with individual atoms, but also to changes in the principles of organizing science [3;7]. What changes will the development of nanotechnology cause in us, now we will try to find out.

The main feature of nanotechnology is that their capabilities are not fully predictable. Today, no one can predict with mathematical precision where tomorrow will lead all of humanity and how it will change us. Any forecast given this morning can be corrected this evening. It can be seen that significant changes are taking place in the structure of modern scientific knowledge. This, in turn, requires a revision of many (if not all) fundamental laws of modern classical science. What does this mean? This means a very significant adjustment of the mind and the whole worldview in general. The scientific landscape of the world has already begun to experience significant qualitative changes. At the same time, the speed of these changes is increasing significantly. There is a specific compression of time, as a result of which scientists have almost no opportunity to understand the current situation.

Nanotechnology is a resource-saving technology, which helps to solve one of the global problems of our time - the severity of the environmental crisis. Conflicts between nature

and technology are minimized, if not completely eliminated. Nanotechnologies no longer need the material resources that modern mining produces. This means a significant restructuring of the modern geopolitical landscape of the world, in which individual, currently leading states of the world may lose their political power due to the collapse of their economic components.

Small amounts, but organized in terms of quality, mean great opportunities for the positive development of humanity. This means only one thing - the victory of quality over quantitative characteristics - the elite reduces the mass. It reduces, but does not eliminate, but ensures that it remains directly and directly related to its goals and objectives.

The possibilities of nanotechnology should be enjoyed not by closed elite groups, but by all of humanity. Therefore, nanotechnologies must be open, otherwise there is a risk of increasing totalitarianism in politics. Society, not politicians, should control and direct the development of nanotechnology to avoid a new man-made round in the field of manipulation of public consciousness. With technocracy ruling, nanotechnology can become a tool in the hands of unscrupulous politicians. Therefore, it is necessary to add a humanitarian component to the technocratic component of nanosystems, to make them free and open to all mankind without any exceptions.

At first glance, the development of nanotechnologies may seem like a new, strong confirmation of the correctness of the materialist philosophy, a victory of the atomistic system of Democritus. In fact, everything is far from what it seems at first glance.

First of all, it is necessary to pay attention to the fact that human thought was not only able to penetrate the atomic world, but also learned to use it for its own purposes, to model its quality and behavior. It is not the atom that controls man, but man controls the atom. In other words, the world of Plato's ideas in his intellectual development was able to reach the level where Democritus could control the world of atoms according to his understanding. And this means that the next victory over idealism is not materialism, but, on the contrary, in the face of

modern scientific thinking, idealism again shook the foundations of classical materialism. The world of Plato's ideas, in particular, turned out to be more viable than the materialists themselves had imagined. They believed that he would finally end them with a dialectical-materialist doctrine. But in fact it turned out that Platonism was perfectly able to find a progressive development in modern scientific developments. Modern science is more likely to confirm Platonism than to deny it. In addition, there is a clear connection between the nano-worldview and elitology (the origins of which go directly to Plato). In the latter case, the principles of nanotechnology practically coincide with the principles of elitology.

Nanotechnologies are small quantities, but their potential is enormous. How can one learn to use them effectively when there is a psychology of mass consumption and mass society? It is clear that the answer to this question is beyond the scope of mass society and mass culture. And this is another manifestation of the ideology of equality, which goes back to the tradition of materialistic philosophy. Plato again sees himself ahead of Democritus, however, for the simple reason that his world of ideas is living, while the world of atoms characterizes inanimate matter (the world of physics). The nanoworld is a world of physics and is entirely dependent on the world of ideas. It is the ideas that govern nanotechnology, not the objective laws of physics. This idea becomes clear when we emphasize the role of the human factor in the development of the entire field of nanotechnology.

The changes brought about by nanotechnology force not only a comprehensive analysis of the philosophy of science, but also a revision of some of its basic values.

In the past decades, science has gone through a path of narrow specialization, as a result of which humanity has achieved great results. "All that is done in the field of material life today, we have achieved because of this highly specialized system of science and education. But, on the other hand, we have lost the idea of a holistic view of the world and entered a kind of dead end... the creation of a highly specialized system

of science, in turn, determined the network principle of the development of science" [3;7]. Science alone cannot restore the broken balance of the world view. To do this, he must again turn to philosophy for help and restore the once disturbed balance. In the absence of philosophy, various fields of science may be lumped together that do not understand the meaning and significance of the other science.

Experts say that "In the last quarter of the 20th century, information technologies with an intersectoral nature entered the life of society, as they are used in absolutely all areas of science and production. Information technology was a kind of link that united all interdisciplinary disciplines. Proponents of nanotechnologies claim that the development of these systems will lead to a real scientific revolution, "new science, new energy, new types of weapons will appear, and ultimately a radically new geopolitical image of the world"[3;6]. This new scientific revolution, according to its potential, will be able to completely destroy the current picture of the world and establish a new order in it.

In the realm of politics, nanotechnology now looks like science fiction. Now everyone can let their imagination run wild in this matter as they wish. But it may turn out that all this is another delusion of the human mind, which leads us all to "nothingness" (false world, world of illusions) and not to existence. It is important to understand in time when and where reality leaves the world of ideas and the world of dreams and acquires the characteristics of utopia. And here the role of philosophy can be invaluable.

Nanophilosophy is not only a philosophical support for the nanoproject. It is also an attempt to understand the meaning and importance of these technologies in the lives of modern people and future generations. Nano-philosophy is a philosophy of personality in the era of post-industrialism and high-tech conditions, where qualitative indicators, typical of the information world, dominate, rather than quantitative indicators. Where quality is the main value that defines everything and everyone, the principle of elitism usually prevails.

It is clear to us that nanotechnologies in the field of natural and technical sciences will sooner or later enter the field of concrete sciences, especially humanities and social sciences. A purely technical understanding of nanotechnology is a deliberate narrowing of its possibilities. And on the contrary - the presence of philosophical support means that wide possibilities open up in the matter of changing the entire spiritual potential of humanity. At the same time, we are not really talking about an individual and a certain political or national group of people, but about the whole of humanity. But over time, nanotechnologies should become the property of the entire planet and the entire Cosmos from the property of mankind. It is necessary to add the theories of post-industrialism and globalism, after which the general picture of nanophilosophy takes on very clear contours.

Nanotechnologies confirm the conclusions of elitologists that the level of elite education and the level of elite qualified specialists will increase significantly during the period of high-tech dominance[4;9]. Therefore, nanophilosophy should become the philosophy of life of this scientific elite to help them adapt as much as possible to the great changes taking place in the world due to the spread of nanotechnology. But this elite should be aimed "not for itself", but "for everyone", that is, not to satisfy its vital needs, but to openly serve all humanity. This is the meaning of the elitist idealism of our time.

Conclusion

It is an absolute fact that nanophilosophy will become the main philosophy of the 21st century. Today, we can only predict and project the basic parameters of this future superphilosophical system, but its detailed study is still a mystery with seven seals, because nanotechnology has not yet formed into a complete system of knowledge. Undoubtedly, it will be a complex philosophy "synthesized" on the basis of already existing philosophical systems. Which principle of synthesis of these systems into a single field of knowledge will prevail will directly depend on the path taken by the development of nanotechnology itself.

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