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NANOBIOLOGY - THE ONTOLOGICAL SOURCE OF NANOTECHNOLOGIES AND ITS SYNERGIC NATURE

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Abstract:

This article tries to analyze the place and role of today's most modern field of nanotechnologies in the philosophy of existence through the opinions of several philosophers and scientists.

Keywords: Nanoexistence, nanotechnology, macroexistence, existentialism, nanoreality, ontology, atomic-molecular level.

Nanotechnology is a complex mechanism for human beings to master the nanobeing that is being formed and gradually manifested. Nanobeing is one of the levels of existence of the universe, where a person has access to its resources with the help of nanotechnology. Ernest Kapp, who introduced the concept of "technique philosophy" to science, considered that "technique is a projection of human organs, ontologically equating nature and technology, making the latter the twin of human nature, and the special shape of the weapon must be derived from the shape of this organ" [1.93]. It should be noted that nanotechnologies are an "introverted project" that has a different result than projects focused on the environment, human lifestyle and conditions, as they enter human life. It follows that the nanoexistence is the result of the existence of nanotechnology. Nanotechnologies do not create living conditions, but a completely different existence for a person, as a result, they enter the human body.

The issue raised by Heidegger in the 20th century is still a cause of debate among philosophers. There is a need to equalize existence to the "macro" level, in microtechnologies this need is related to modern technologies that show the diversity of matter at different levels. Thus, the relativity of the concepts of essence, matter and nature for the subject of nanotechnologies, that is, man himself, is shown in the interaction of nano and macro levels.

The concept of nanobeing includes the gross quality produced by nanotechnologies. With nanoreality it is possible to determine the number of nanomaterials that have already been created to date, but with nanobeing it is impossible to determine them, because they only change the image of human existence, but cannot extract its ontological essence. In this way, the term "nanoreality"[2],

introduced by A. I. Putilin, is for social and cultural reality, but it is not an ontological reality underlying the first, but an actual reality.

For a long time, physics has been studying the levels of matter - micro, nano, pico, femto, atto. They have a common basis of quantum effects and differ from each other in their properties and qualities. As technology advances, these levels become as important ontologically as they are epistemologically.

"Nanos" is Greek for "small" or "tiny". Therefore, it would be etymologically correct to spread the concept of pico, femto, atto levels of nanobeing, which does not destroy the special meaning of the suffix "nano" in the narrow sense, which indicates a certain size. If we dwell on the problems of thinking and nanobeing, then it should be noted here that it is not possible to immediately determine the interaction of thinking with nanobeing independently of macrobeing, because thinking enters a new direct expression and requires a special connection with the subject. At the current stage of the development of nanotechnology, the interaction between nanobeing and thinking requires a separate analysis, but for now it is necessary to limit the understanding of the category of "nanoexistence" itself.

Transhumanism equates human potential with divinity, although in this case there is only reason to introduce the assertion of a "nano" level of matter approaching a technically comprehensible metaphysical existence thanks to the feasible advances of nanotechnology. It is too early to define exactly what this represents, but nevertheless, based on the connection between metaphysics and nanoexistence, it can be concluded that:

- nanobeing is the organization of metaphysics through a technical method.
- existential reality loses its classical precision brought about by nanotechnology through changes, one of such changes is the possibility of merging man with machine.

In order to substantiate the above, it is necessary to clarify the ontological basis of the development of nanotechnology, which determines the definition of the concept of "nano-being", only then the consequences of the development of nano-technology can be studied and actualized in relation to human existence, which involves the discussion of ethical and social problems related to nano-technology.

The main factor that proves the emergence of the category of nanobeing is the general and universal feature of nanotechnologies.

Nanotechnology makes it possible to use a certain level of organization of matter to realize human ideas. It is worth noting that almost the entire picture of the current world is the use of one type of technology, although it does not change the evidence of man to conclude about the universality of nanotechnologies, which is manifested in the fact that every practice is carried out with matter as a transformation at the atomic-molecular level, which has an individual expression on its basis. Drexler, in his book "Creative Machines", described them as "Inefficiency of Involving Gross Technologies".[3] From this it becomes clear that nanobeing is a category that means the result of atomic-molecular control of matter that changes the forms of human existence by changing the foundations of these forms. This is the freedom of the subject, which is a necessary condition of atomic-molecular control, expressed in knowledge and nanoscience, in self-awareness and in philosophical thinking.

Reflections on the concept of nanobeing necessarily actualize the question of being, its interrelationship with nanotechnology. In the philosophy of the 20th century, it was brought to light by the works of M. Heidegger. In relation to being, M. Heidegger emphasizes: "Being has a place as a measure of participation in the 'hidden'"[4.147].

Thinking about the changes of the era occurs at the level of philosophical thinking. Philosophy itself participates in the objectification of reflection nanobeing, that is, as a set of ways of relating to nanobeing, which makes it meaningful and life-giving. Naturally, objectification occurs not for itself, but for the human mind. Nanobeing itself is formed as a technical event, in this case the modality of the event that can happen is involved in the project of nanotechnology products.

Thinking about nanotechnology is of practical importance, because its ontological essence determines its status, that is, the impact of nanotechnology depends not only on the way of life, but also on its existence, not only on the living conditions of a person, but also on the person himself.

The qualitative difference between the properties and structure of nano and macro objects, on the one hand, necessarily changes their interaction, and on the other hand, if nano and macro objects are compared, then there is still no difference in how they live in the social and cultural space. Two objects - a normal cup and a nanocup differ for us only in the process of their practical use.

The Greek philosopher Aristotle stated: "something pre-existed from the beginning, because the possibility is always ahead. It is worth noting that our consciousness, our exciting life... is rooted in the relativity of one level" [5]. Nanotechnology does not eliminate this rooting, but opens up the possibility of another level that is not fully formed into our sensory perception while being integrated into the macro-being, which is always available to us in one way or another. Therefore, in spite of Hegel's logical opinion: "possibility is something that is lacking, shows something else, is inconceivable and meaningless without each other in reality"[6], possibility is not a lack, but an excess that is formed into reality from fullness.

The process of objectification of nanotechnologies is the phenomenon of transformation of nanobeing into a mode of reality. On the one hand, it can be seen that a person is somewhat dependent on technology, and on the other hand, the existence of a person, his freedom continues with nanotechnologies and is embodied in the mode of reality of nanobeing.

Nanobeing cannot be excluded from human participation, much like Heidegger's exclusion of existence from consumption. The question can be asked: how does nanoexistence affect human existence? But whatever it is, it is already creating an empirical field for the formation of nanoexistence and the concept of it.

Nanobeing An exploration of the various aspects of the concept of a single being, initiated by Parmenides, shows integrity, truth, goodness, and beauty as its essential characteristics[7.58]. Nanobeing is technical in itself, nanobeing is non-technical to man, that is, something that has been reoriented by consciousness and remains in it. Science studies nanobeing for itself, and philosophy studies nanoexistence for man.

Nanotechnology borrows its skills from nature, but even so, technology divides matter into two levels, whose interaction leads to conflicting and harmonious consequences.

At the moment, the development trends of nanobeing allow us to think about its generality, but it has only one character. First, the growth of general consumer products created by nanotechnologies confirms this trend, and secondly, the very principle of changing the image of the world at the atomic-molecular level is similar to the generality of the image change that has occurred at other levels so far.

The qualitative aspect of the process of interaction between the "macro" and "nano" level is that while the nanobeing is changing the way of human life, it is also gradually changing the essence of life with the help of nanorobots.

As a result of such changes, A. Ch. Putilin believes that the independence of the macro level belonging to a person can overcome the border between the macro and nano level, although he does not take into account such a situation [2].

References

1. Капп Э, Кунов Г, Нуаре Л., Эспинас А.. Роль орудия в развитии человека. - Л.: 1925. ст.-93.
2. Путилин А.И. Нанотехнологии и социум. Учебно-информационный материал. 2007 г. Электронный ресурс: http://filosof.historic.ru/
3. Дрекслер “Машины Созидания”. Электронный ресурс: http://www.Ladoshki.com
4. Хайдеггер М. Время и бытие: Статьи и выступления: Пер. с немецкого. - М.: Республика, 1993 г. -147 ст.
5. Аристотель. Метафизика. Произв./изд...Эксмо, Антология мысли 2006 г.
6. Гегель Г.В.Ф. Наука логики. - Спб., 1997 г
7. Philosophy: a public dictionary. -T.: Chief editorial office of "Sharq" publishing-printing joint-stock company, 2004. P.-58.
8. Hayot Ashirmatov, The Essence, Significance and Possibilities of anotechnologies, Zien Journal of Social Sciences and Humanities, 67-70.
9. Hayot Ashirmatov, NANOTECHNOLOGY AS A NATURAL-TECH-NOLOGICAL PROCESS OF SYNERGETIC TYPE WITH COMPLEX MATERIAL STRUCTURE AND GNOSEOLOGICAL PROPERTIES, Asian Journal of Multidimensional Research (AJMR), 30-35.
10. Ashirmatov Hayat Haitovich, Synergetic Analysis Of Nanotechnological Development. The PHILOSOPHICAL QUEST, p.82-91.