

# The sacral nature of knowledge: descriptors of scientific thinking

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**Abstract.** The article deals with the process of transformation of scientific forms of classical knowledge. In accordance with the positivist approach, the emergence of classical science fits into the tendency of transition of mankind from myth to logos by purifying pre-scientific knowledge from prejudices, inaccuracies and “unspelling the world.” The traditionalist view of Guenon R., Evola G., Dugin A.G. explains scientific knowledge through the emergence of experimental and mathematical natural science, the main feature of which is the laws of logical sequence. The main epistemological forms determine the criteria and the main line of modern scientific development, but, at the same time, they can be one of the most important causes of the crisis of modern civilization. In addition to the first two, there is a third epistemological approach that, in particular, is developed by N.N. Strakhov and Steiner R. and it includes signs of both approaches. On the one hand, it involves a revolutionary alteration of the image of nature - from a holistic living organism to a mechanism necessary for further development. Here, one can see solidarity with positivists, but it is not the highest stage in the development of cognition of nature; this shows the main disagreement with the positivist point of view. Acquaintance with an alternative approach makes it possible to understand the process of dividing modern natural science into official and alternative science, to develop a strategy for solving global anthropological problems.

## 1 Introduction

There are two main approaches to determining the time of appearance of scientific knowledge. One of them claims that science appears almost simultaneously with the birth of philosophy - in ancient Greece; in this case, the beginning of scientific understanding comes from the ancient forms of philosophical reflection and, to a certain extent, from medieval scholasticism which are replaced by classical science as a result of the scientific revolution of the 17th century. According to the second, more common approach, in antiquity there is a process of the emergence of science, when some elements of the scientific method are taking shape, and which completely ends at the turn of the 16th-17th centuries. It is from this moment that the emergence of a new form of knowledge follows, the hallmark of which is the view of nature as a mechanism. A fundamentally new way of

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cognition is being developed, including mathematical and experimental methods that use the basic principles of formal logic. From this perspective, ancient and medieval natural philosophy are regarded as pre-scientific forms of cognition, and its representatives are regarded as researchers who failed to get to true understanding of the causes of natural processes and phenomena.

In this regard, it should be noted that the state of contemporary science is one of the main causes of the crisis of modern civilization and that scientific thinking is the basic methodological form determining the processes of cognition of the surrounding reality. Creating a methodological basis for understanding reality and the events occurring in it, science bears the main responsibility for overcoming the crisis states of civilization development, having its own problems with the choice of true criteria for explaining the causes of crisis phenomena. In particular, the Club of Rome called "the unconsciousness of what is happening" as the third global problem of our time.

## 2 Scientific Revolution of the 17th Century

A clear line between ancient science and modern science can be seen in the following definition: "By science we mean the system of relations between a rational person with a mechanically understood reality that has developed at the dawn of modern time, including theory - knowledge of this reality (claiming objectivity, verifiability and indisputability) - and practice (technique) - ways of influencing this reality" (Dugin A.G., 2002, p. 28-29). A strong point of this definition should be considered a clear and precise indication of what separates the pre-scientific and scientific view of nature.

So, it is these two images of nature, or the basic metaphors of nature, that determined the fundamental opposite of natural philosophy (pre-scientific natural sciences) and classical (scientific) natural sciences. These two images, like two different seeds, bore different fruits. The fruits of natural science can be judged by the state of nature today and the bleak prospects of it and the mankind in the case of preserving the old ideas about nature as a mechanism and an endless reservoir of resources and strategies for its conquest. As for natural philosophy, it is usually presented mainly as a result of sincere errors of nature researchers that were overcome thanks to the genius of Descartes, Newton, Galileo and other founders of science. In this case, it is completely overlooked that the change in the image of nature from an integral living organism to a dead mechanism has unscientific roots like the entire scientific revolution. It is significant that the famous historian of science I.S. Dmitriev, considering the revolutionary cosmological views of Copernicus, noted their unscientific roots (Dmitriev I.S., 2006).

The main distinctive feature of the scientific method of studying nature is directly related to the change in the image of nature - the systematic use of experimental methods; the first founders of science, in particular, F. Bacon and G. Galilei, called them torture of nature, a kind of "bootikin" during which nature had to reveal its secrets and laws. It should be noted that Goethe showed in practice a different way of studying nature, dispensing with experiments, with the help of "contemplative ability of thinking" or "intellectual contemplation" (Svasyan K.A., 2001).

Changing the image of nature lifted the ban on intervention of researchers in natural processes and phenomena. At the same time, there was a process of desacralization not only of nature, but also of mathematics which in its previous form was not able to fulfill the function that it had to perform in natural sciences. Desacralization of nature (nature as a mechanism), desacralization of mathematics (quantitative understanding of numbers) and lifting of the ban on experiment led to the emergence of experimental-mathematical natural sciences. In other words, the union of the experimental method and mathematics of modern times was the basis of a new way of thinking and cognition of nature. But it follows from

this, in particular, that changes in mathematics (the stage of mathematics of variable relations) in the middle of the 19th century that are revolutionary in relation to the mathematics of modern times should result in the changes in contemporary natural science itself. Indeed, the latter has already clearly been divided into official and alternative science.

### **3 Positivist and traditionalist approaches to understanding the emergence of science**

At least three points of view on the emergence of the scientific method of cognition of nature and science itself can be distinguished. According to the positivist position, the genesis of natural science is the result of the process of liberating the human mind from the errors of mythological, religious and natural philosophical thinking, the liberation necessary for the progressive development of mankind. The results of this “liberation” need not be talked about much, as the current environmental situation speaks about this. Here is what the famous Russian futurologist A.I. Neklessa writes about the joyless results of world desacralization: “Having set out to dispel the world, to bring it out of the yoke of elemental, irrational forces and religious obscurantism, modern civilization instead seems to have freed the chained Prometheus and, in the end, given the people who believed it to the power of even darker idols” (Neklessa A.I., 2000, p. 42).

The opposite is the traditionalist approach, it sees the emergence of natural science as a regression and degradation of a human and human cognition, negatively assessing the process of converting alchemy into scientific chemistry, sacred geography (classical geopolitics is a secular echo of it) into physical geography, astrology (that included astronomy, which is proven even by an example of J. Kepler) into scientific astronomy etc., a process that took place under the influence of the famous “Occam’s razor” designed to implement a spiritual castration, i.e. to cut off the spiritual component of all processes and phenomena leaving only the material component, to “unspell the world” (Weber M., 1990, pp 713-714.). Y.V. Mamleev, who took the traditionalist position, pointed out the high price that the technological civilization, which gained control over the external aspects of nature, would have to pay for ignoring the internal laws of nature which is actually a living creature (Mamleev Y.V., 1992, p. 83)

The positivist and traditionalist approaches consider the emergence of modern science - experimental natural science - in black and white and cannot help in solving global environmental problems.

Representatives of the positivist approach see this as natural and, at the same time, progressive development, devaluing the pre-scientific knowledge of nature. At best, it is argued that natural sciences include pre-scientific knowledge. “Despite the apparent (for a modern human) abstraction and triviality of the current non-cosmic worldview, the latter is the result of long critical processing of the previous spiritual culture, and in this sense it is internally more complex and richer than some form of “cosmic consciousness”” (Filatov V.P., 1994, p. 12).

Their opponents see the emergence of natural sciences as deviation and regression, now devaluing the knowledge of the last four centuries. At the same time, relying on the well-known cyclic laws (on four yugas in the Indian tradition or four centuries in ancient Greek mythology), they note the inevitability of this deviation and its temporary nature. Hence, there is the idea of the Conservative Revolution, the idea of a return to traditional society and its institutions. But the main thing is still devaluation of the achievements of mankind starting from the era of the New Age.

However, one can find thoughts in separate statements of representatives of both approaches that at least soften their positions toward recognizing the merits of the pre-

scientific knowledge and the need for emergence of the natural sciences, respectively. Traditionalist Y.V. Mamleev explains the emergence of a scientific worldview as follows: “The entire contemporary standard Western mentality is based, in essence, on the belief that our physical world is a closed system from which there is no way out. And all reality is imprisoned in this visible world. There is nothing outside. What lies beyond is not even Platonic shadows but in general something completely unknown that is not taken into account. Hence, there is the existential loneliness of a human. Perhaps this idea of isolation, like everything in the world, had its advantage, because a person had to somehow concentrate on himself, because such openness, which was in the ancient period, such a contact with other worlds was too disturbing for a person. There is some kind of a positive thing, but in general, of course, as soon as the closed system collapses, then all this modern civilization based on primitive illusions that pass off as common sense will completely collapse” (Mamleev Y.V., 2006, p. 83).

#### **4 The third approach to understanding the genesis of science**

The fact that the positivist and traditionalist approaches are largely ideological and one-sided in nature became especially clear to us after learning the theses of two thinkers who have no connections and do not know each other's views. It is there where we find the origin of the third view on genesis of the natural sciences, although they are implicitly contained in writings of some other authors.

Thus, in February 1860, N.N. Strakhov (1828-1896) shows the connection between the natural sciences and materialism, noting that this is a more important matter than is commonly believed. At the same time, he emphasizes that the emerged materialism expresses the meaning of a new way of studying nature only to a certain extent. Further, the author points out the impossibility of the emergence of materialism in antiquity and the Middle Ages, because everything was imbued with spirit there (Strakhov N.N., 2007, p. 117). Earlier in 1797, F. Schelling writes that “Nature is visible Spirit, Spirit is invisible Nature” (Schelling F., 1998, p. 128). The main condition for the emergence of materialism was that “spiritualism accepts greater certainty, so that it becomes fully clear. Among writers of the first centuries of Christianity, even God was usually regarded as a material being, abiding in space and time. We see, therefore, that the distinction between spirit and matter, which is so usual for us, did not exist then. The concept of the spirit was not understood at all even when they began to compare the spirit with the body and began to deny the various attributes of matter in the spirit. Thus, they only found that the spirit is invisible, intangible, weightless, etc., that is, they received nothing more than some subtlest matter, something very indefinite, but essentially still not different from matter” (Strakhov N.N., 2007, p. 118).

N.N. Strakhov points out that “unspelling of the world” was necessary for the study of matter through its temporary and conditional separation from the spirit. At first, deism helped, and from the middle of the 19th century atheism. As a result, nature “became submissive, studied” (Strakhov N.N., 2007, p. 119). Materialism as transient phenomenon was declared in the 20th century by a number of outstanding scientists. Thus, physicist W. Heisenberg made the following admission: “The first sip of a glass of natural science will make you an atheist, but at the bottom of the glass, God awaits you.” The same thing but in other words was expressed by the biologist L. Pasteur, “about the poverty of materialistic philosophy,” the physicist M. Planck, “about the conscious Mind as the matrix of all matter” (cited from: Braden G., 2008, pp. 56, 245-246) and D. Bohm, “the theory of the “hidden” and “explicit” order”, the biologist G. Braden, “the concept of the Divine Matrix” (Braden G., 2008).

The second representative of the third approach after N.N. Strakhov is the German thinker R. Steiner (1861-1925), who, in one of his lectures in 1911, noted that until modern times the Earth was considered not as a lifeless cosmic body but as a spiritual being. “This had to happen one day for nature to appear devoid of God and spirit so that a person could embrace a set of abstract thoughts for comprehending nature, as was possible in the views of Copernicus, Kepler and Galileo” (Steiner R., 1994, p. 22, 241). This is the same thought of the necessary but at the same time temporary nature of the materialistic view of the world as the one of N.N. Strakhov.

There is every reason to believe that the time of materialism is coming to an end, as evidenced by the previously stated statements of prominent figures of modern science, for example, two concepts that arose independently in the second half of the 20th century of the Earth as a living creature - the Gaia Earth of the English biologist J. Lovelock (Lovelock J.E., 1996) and the Earth as a living substance of the Russian geologist I.N. Yanitsky (Yanitsky I.N., 1998).

## 5 Alchemy and chemistry: the relationship problem

If we switch to the positions of the third approach to understanding the genesis of the natural sciences, it is necessary to rewrite the history of development of the study of nature in many respects. For only in this way can the laws of development of the phenomenon under study be revealed. Here, many interesting discoveries expect researchers, for example, in clarifying the relations of modern physics and magic, scientific chemistry and alchemy.

Representatives of the positivist approach see in scientific chemistry the result of well-known procedures in relation to alchemy in the framework of “unspelling the world”, refusing the latter the right to exist in the modern world (Panychik A.V., 2018). Comparison of alchemy and scientific chemistry on such grounds as objectives, method, used substances shows that there is nothing in common between them, and most importantly, transformation of the first one into the second one is impossible (see the table).

**Table 1.** Historical forms of chemistry

Elements	Alchemy	Archemy	Spagiria	Scientific chemistry
Objectives	Spiritual	Material (conversion of base metals to noble metals)	Material (obtaining substances with desired properties)	Material (obtaining substances with desired properties)
Method	Activation of <i>spirits</i> of substances	Activation of <i>substances</i>	Activation of <i>substances</i>	Activation of <i>substances</i>
Substances used	“Live” metals	Base metals	All substances	All substances

The modern alchemist Fulcanelli considers it necessary to distinguish three forms of ancient chemistry - alchemy, archemy and spagiria. It was the latter, according to him, that was the forerunner of scientific chemistry. Only alchemists strove for spiritual not material objectives, only in alchemy, “live” metals were used as the initial substance, and the essence of the alchemical method was to activate not the substances *themselves*, as in other forms of chemistry, but the activation of *spirits* of substances. In scientific chemistry, as in all classical science, the role of the researcher was reduced to zero, because the main thing

was the correct application of certain methods. So, in structural chemistry (the third stage in the development of scientific chemistry), it has been revealed that the rate of a chemical reaction is influenced by: its conditions (concentration of reacting substances, temperature, pressure, presence of catalysts and inhibitors) and the nature of the reagents, i.e. substances involved in the reaction. The structure of the alchemical method is more complex and includes, first of all, the alchemist himself (his spiritual level, hand temperature), who should take into account the influence of a number of astrological and other factors (Fulcanelli, 2004, p. 125, 126, 131, 132).

It should be especially noted that Fulcanelli calls scientific chemistry “the science of facts” and alchemy “the science of causes”. If the first one “studies natural bodies”, then the second one “seeks to penetrate the mysterious dynamics of their transformations”. As the truth of this statement, he gives two examples that are inexplicable from the point of view of scientific chemistry. Thus, it is known that when split in the dark a piece of sugar emits a blue spark that is not given in its chemical formula. In his opinion, the chemical formula of water is also incomplete, because fire is needed for its artificial production, in addition to hydrogen and oxygen, which is not in it. Moreover, the water thus obtained does not shine in the sun and does not have its usual taste (Fulcanelli, 2004, p. 87, 91).

## 6 Conclusion

Thus, the emergence of the natural sciences in the 17th century was the result of the rise of human spirit. It led to the advent of modern technology, which allowed humanity to use the revealed laws of nature to improve people’s lives. However, the emergence and exacerbation of global environmental problems resulted in the need to revise the history of its occurrence and the image of nature. At the same time, it becomes obvious that two competing approaches - positivist and traditionalist approaches - cross out the achievements of pre-scientific natural science and scientific natural science, respectively, which indicates their one-sided and ideological character.

In this situation, we see a way out in the development of the third approach that adequately evaluates both the pre-scientific and scientific stages in the development of natural sciences, the foundations of which were laid by N.N. Strakhov and R. Steiner. The main provisions of this approach are the following: the emergence of a materialistic view of the world is necessary but transient in nature; the era of materialism has fulfilled its task and must cede its leading place in the context of the general development of epistemology of being.

It is necessary to pay attention to the study of Goethe’s writings in natural sciences and the application of the “contemplative ability of thinking” described in them, which “must be freed once and for all from their grim torture chamber of empiricism, mechanism, and dogmatism” (Goethe J.W., 1960). One should creatively rethink the history of emergence of the basic natural sciences - physics, cosmology, chemistry, geology, biology and geography. Modern natural science has been subdivided into official and alternative science. Alternative natural science is distinguished by a return to some representations of pre-scientific science at a new stage of development. This is, first of all, a holistic view of the world, recognition of the presence of spirit in it, consideration of a person as an active participant and not a passive observer of global natural and social processes.

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