ОНТОЛОГИЯ И ТЕОРИЯ ПОЗНАНИЯ

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GENERALLY RECOGNIZED SCIENTIFIC CATEGORIES AS A THEORETICAL AND METHODOLOGICAL BASIS FOR SCIENTIFIC RESEARCH. PART III

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Abstract

Aim. Based on philosophical methodology, consider in detail the content of some general scientific (philosophical) categories "form", "phenomenon", "property", "function", "character" (that is, categories that reflect the essence of the ways in which the internal signs of phenomena in the environment are manifested), as well as "environment", "condition", "cause", "ground", "consequence", "necessity", "randomness", "nature of the phenomenon", "possibility" (categories reflecting the impact of the environment on the phenomenon under study) and define them in modern edition.

Methodology. The work was carried out based on a systematic approach using classification methods and comparative analysis.

Results. Research within the framework of the system of philosophical categories because of cognitive activity, which is a systematization of information about a phenomenon and the naming of this phenomenon, is still relevant today. The categories reflect the characteristics of phenomena of a certain class, record the essential properties of the phenomena and the connections between them. In addition, based on the content of general scientific categories, methods of cognition are formed. They also have a general scientific character and participate in all scientific research without exception. This fact gives special importance to understanding the essence of general scientific (philosophical) categories, which, working to solve problems of scientific research, are transformed into methods of scientific research. This circumstance determines the need for a detailed presentation of the content of general scientific (philosophical) categories in their modern edition.

Research implications. The results of the study can be used to improve the methodological competencies of both teachers of philosophical disciplines and students.

Keywords: form, phenomenon, property, functions, character, environment, condition, cause, basis, consequence, necessity, randomness, nature of the phenomenon, possibility

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ОБЩЕПРИЗНАННЫЕ НАУЧНЫЕ КАТЕГОРИИ КАК ТЕОРЕТИКО-МЕТОДОЛОГИЧЕСКИЙ БАЗИС НАУЧНЫХ ИССЛЕДОВАНИЙ. ЧАСТЬ III

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Аннотация

Цель. На основе философской методологии детально рассмотреть содержание некоторых общенаучных (философских) категорий: формы, явления, свойства, функции, характера (т. е. категорий, отражающих суть способов проявлений внутренних признаков явлений в среде), а также среды, условия, причины, основания, следствия, необходимости, случайности, природы явления, возможности (категорий, отражающих воздействие среды на исследуемый феномен) — и дать им определение в современной редакции.

Процедура и методы. Работа выполнена на основе системного подхода с использованием методов классификации и сравнительного анализа.

Результаты. Исследования в рамках системы философских категорий как результата познавательной деятельности, представляющей собой систематизацию сведений о каком-либо явлении и назывании этого явления, сегодня по-прежнему актуальны. В категориях отражаются признаки явлений определённого класса, фиксируются существенные свойства явлений и связи между ними. Кроме того, на основе содержания общенаучных категорий формируются приёмы познания. Они также имеют общенаучный характер, участвуют во всех без исключения научных исследованиях. Этот факт придаёт особое значение пониманию сути общенаучных (философских) категорий, которые, работая на решение задач научных исследований, трансформируются в приёмы научного исследования. Данное обстоятельство детерминирует необходимость детального представления содержания общенаучных (философских) категорий в их современной редакции. Теоретическая и/или практическая значимость. Результаты исследования могут быть использованы в совершенствовании методологических компетенций как у преподавателей философских дисциплин, так и у обучающихся.

Ключевые слова: форма, явление, свойство, функции, характер, среда, условие, причина, основание, следствие, необходимость, случайность, природа явления, возможность

Introduction

Having presented in previous articles the essence of philosophical categories that reflect the internal, immanent characteristics of phenomena, let us move on to the consideration of general scientific categories that reflect the ways in which internal processes occurring in phenomena are manifested.

Categories "form", "phenomenon", "property", "function", "character"

Let's start with the content of the "form" category. As a rule, form is considered as a way of existence and expression of content. Sometimes form is understood as a way of expressing, existing and organizing content¹. At first glance, this approach remains largely

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 149.

true to the Aristotelian tradition. At the same time, it contains a nuance that cannot be ignored. If form is a way of expressing not only the existence of content, but also its organization, then two questions immediately arise: a) is form a way of expressing the essence of content; b) why form is associated specifically with the organization of content, and not with its structure, quality, essence, functions, etc.

The remark about the unity of content and form is fair. It is also true that their delimitation is possible only in abstraction, but it is still possible and necessary when it comes to scientific categories. Their precise, strict definition involves the use of an abstraction mechanism, without which it is impossible to understand the nuances and features of these phenomena.

Form (lat. forma) – "primarily the external outline, the external appearance of an object, the external expression of some content..., as well as the internal structure, structure, a certain and determining order of an object or the order of a process..."1. The above thesis carries a charge of compromise, since its authors propose to distinguish between both external and internal forms of phenomena. It receives uncompromising development in the following conclusions: «The external form is associated with the configuration of the object, its external spatial and temporal boundaries»². And further: "The internal form characterizes the method, the connection between the elements of the content of a thing, its contradictions, sides, tendencies, etc."³.

Summarizing the above, we will make an intermediate conclusion: a) while rightly distinguishing between the external and internal forms of phenomena, we must not forget about the existence of their content and identify with it primarily their internal form; b) under changing conditions, the internal form can become external and vice versa; moreover, under certain conditions, dynamic transformations of forms into content, and contents into the forms of new, changed phenomena, are possi-

ble; c) under certain conditions of existence, it is quite strictly possible to distinguish between the contents of phenomena (a set of interrelated elements) and their forms.

Thus, the category "form" reflects the essence of stable ways of manifesting the contents of a phenomenon in the environment. Phenomena resonate in the environment not only with their contents, but with their essences⁴. Science says that stable ways of manifestation of phenomena in the environment of entities are reflected in the philosophical category "phenomenon". At the same time, in modern scientific literature there are many comments, clarifications, and reflections on the essence of the category "phenomenon".

Firstly, there are works in which the phenomenon is interpreted as everything that is sensually perceived. This approach to the phenomenon is acceptable, but, in our opinion, with certain reservations, which can be expressed in two questions: are phenomena only perceived sensorily or is the intellect involved in this process? Is it legal to determine the content of the category "phenomenon" without showing its connection with the essence of objects, things, processes! It seems to us that both questions have the right to life in the context of our reflections. It is confirmed by the conclusion contained in another encyclopedic source: "Phenomenon, ... Essence, the content of something (objects, processes) in external expression, the direct reflection of a thing in sensory perception" [3, c. 215]. As can be seen, here too the phenomenon is associated exclusively with the sensory perception of things. This is on the one hand. On the other hand, its existence is presented not only as an external expression of essence, but also of content. Thus, rigor in the approach to the phenomenon is lost because it is known that the external expression of the content is realized by the form of the phenomenon.

Secondly, one cannot ignore the original, somewhat, as it seems to us, camouflaged position regarding the content of the category "phenomenon". Why are these adjectives used? Only because the author of the point of view,

Форма // Философский энциклопедический словарь / ред.-сост. Е. Ф. Губский и др. М.: ИНФРА-М, 2009 С 490

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 150.

³ Там же. С. 155.

⁴ Там же. С. 169.

which we will cite in a literal version just below, defines "phenomenon" as a category "to designate in an object, a process, what is directly discovered and manifested before us" [4, c. 166]. It is clear that there is no indication of the connection between the phenomenon and the essence, just as there is no clear position regarding the essence of the process of direct detection of phenomena in the environment.

Thirdly, many researchers defend the fact of a direct connection between phenomenon and essence. True, they express their understanding of this fact in their own way. One can come across the following conclusions in this regard: a phenomenon is "the detection of individual properties of an essence, accessible to the senses"; phenomenon – "a set of external properties, aspects, connections and relationships, objects, processes, which represents a head start for the manifestation, discovery of the essence". Essence is part of the content of an object, and phenomenon is the form of its manifestation; phenomenon is a way of discovering essence.

As you can see, the conclusions regarding the content of the category "phenomenon" are very broad, and in a certain sense, contradictory. At the same time, if they are summarized and integrated, then it is possible to determine the essential features of the named category quite strictly. Summary: a) the phenomenon is organically connected with the essence that determines its existence; b) a phenomenon is an external expression of an essence, representing it in the environment; c) the phenomenon is perceived and reflected both at the sensory level and at the intellectual levels.

Sustainable ways of manifesting the qualities of a phenomenon are usually classified as their properties. This point of view is widespread in the literature. At the same time, there are authors who claim a certain originality in their approaches to understanding the properties of phenomena. Let's pay attention to some of them.

In one of the encyclopedic sources, we read: "Properties are what are inherent in any object,

Certain contradictions contain the following premise: "Properties, ... The essence of someone, something, a quality, a sign that constitutes a distinctive feature of someone, something" [6, c. 148]. We can say this: this conclusion is a heap of contradictions. Their essence: properties are considered both as an essence, and as a quality, and as a sign. It is unlikely to absolutely deny the connection of properties with essences, qualities, and signs of phenomena. The connection cannot be denied, but identification is out of the question.

Perhaps the most common point of view is that a property is "an aspect of an object that determines its difference or similarity with other objects and manifests itself in interaction with them" [1, c. 16]. It is obvious that properties work in the processes of searching for similarities and differences between phenomena. But not only them. This gives the right to believe that properties are only one of the directions in the search for similarities and differences between phenomena. In our deep conviction, those researchers who rightly connect the properties of phenomena with the ways of expressing their qualities in the environment are closest to the truth. On this basis, we can draw the following conclusion: agreeing in the main with the content of the above provisions, we note that more precisely the essence of the category "property" is expressed by the definition "the category "property" reflects the essence of stable ways of manifestation of the qualities of phenomena in the environment" [2, c. 106].

The traditional version of presenting properties as external manifestations of expressions of contents, essences and qualities of phenomena would seem to be universal. But this is far from true. Firstly, in the world of phenomena eve-

what constitutes its specific existence..."². It is hardly possible to deny the authors of this conclusion that the properties of a phenomenon are in one way, or another connected with their existence. What is confusing about this conclusion is that the properties of a phenomenon are in no way connected with their qualities.

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 178.

² Свойство // Философский энциклопедический словарь / ред.-сост. Е. Ф. Губский и др. М.: ИНФРА-М, 2009. С. 408.

rything functions, while manifesting its internal capabilities in the environment. Secondly, in the process of their functioning they influence the environment, changing it. And this sign (sign of functioning) is inherent in all phenomena without exception. Consequently, there must be a general scientific, philosophical category that would reflect the essence of this process. This category is "function". What is the essence of this category? Here, reflections on the essence of the functions of phenomena that are presented on the pages of modern encyclopedic literature are of interest.

Firstly, since functional analysis is primarily associated with mathematics, it is often emphasized that a function in mathematics expresses diverse quantitative patterns in nature¹.

Often functions are interpreted through activity, actions, and the work of phenomena. So we read: "Function, ... (Lat. Function – performing work) ... duty, range of activity of something, work to be performed ... Meaning, purpose, role"². It is possible to present more broadly the points of view on the essence of the category "function", but they, one way or another, overlap with the above positions. This frees us from further work in this direction.

Critically reflecting on the above, it is right to state: unfortunately, the priorities of the mathematical, quantitative in the interpretation of the essence of a function significantly narrows the possibilities of a deep approach to understanding their essence, since qualitative determinants of functions remain outside the zone of attention. Of course, functions are associated with the actions (interactions) of phenomena, but they are not the only ones. This again does not allow us to strictly approach their understanding of their essence. In a word, the above approaches do not sufficiently guide us to strictly determine the ontological basis of functions. And it exists. It is formed by the interacting content, essence, and quality of phenomena. They manifest their integrated

Often, there is a conversation about the nature of the interaction of system elements. At the same time, the question of the elements of which systems are being discussed is leveled: natural, social, or intellectual. It is obvious that the term "character" of a phenomenon can be legitimately used in relation to both natural, social and intellectual processes. This puts on the agenda the question of the philosophical, general scientific meaning of the category "character".

In the scientific literature we find a definition of the nature of phenomena. In one of the sources, you can read: "Character (from the Greek: Character – a distinctive feature, sign) is a feature of a person's behavior, manifested in his manners, actions, and mindset". As can be seen, despite the psychological bias, character is interpreted as a certain line of behavior of a phenomenon in the environment, determined by its internal properties.

Reflecting on the "character of phenomena" as a philosophical category, it is legitimate to note: a) the nature of a phenomenon is a phenomenon determined by its internal characteristics; b) this is a stable line of behavior of phenomena in the environment, connecting their forms, phenomena, properties, that is, integrating their functions;

capabilities in a sustainable way in the environment. These are the functions of phenomena. In other words, "function" is "a category that reflects stable ways of manifestation in the environment of content, essences and qualities of phenomena integrated with each other"³. Not all systems of philosophical categories include the category "character" in their composition. Traditionally, science studies mainly human character. This is what psychology does. At the same time, life leads us to understand the nature of natural phenomena (temperature, pressure, humidity, and others); the nature of social phenomena (the nature of war, political regime, economy, and so on); the nature of intellectual phenomena (the nature of thinking, method, style, way of thinking, and so on).

Функция // Современный экономический словарь / Б. А. Райсберг, Л. Ш. Лазовский, Е. Б. Стародубцева. М.: НИЦ ИНФРА-М., 2023. С. 144.

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 177.

³ Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 179.

⁴ Характер // Философский энциклопедический словарь / ред.-сост. Е. Ф. Губский и др. М.: ИНФРА-М, 2009. С. 502.

c) finally, character is a sustainable way of influencing the environment through its interrelated functions. In other words, the philosophical category "character of a phenomenon" reflects the essence of the way a phenomenon behaves in the environment, formed as a result of the integration of its functions.

Categories "environment", "condition", "cause", "foundation", "consequence", "necessity", "randomness", "nature of the phenomenon", "possibility"

Philosophical categories were presented above, reflecting the essence of the ways in which internal signs of phenomena in the environment are manifested. At the same time, the philosophical algorithm of cognition directs us to study the influence of the environment on the phenomenon under study. Which is what you should do now.

The first thing that catches your eye is the fact of the existence of two groups of phenomena affecting the analyzed phenomena. Some of them directly interact with knowable phenomena. Others, indirectly, through the first group of phenomena. It is quite clear that the intensity of the first group of phenomena on the cognizable phenomenon differs significantly from the intensity of the influence of the second group of phenomena. It follows that the interest in studying the phenomena of direct influence exceeds the interest in the phenomena of the second group. Phenomena that directly affect cognizable phenomena form the environment. In our opinion, there is a philosophical category of the same name that reflects its essence. In other words, the philosophical category «environment» reflects the totality of phenomena that directly affect the objects and processes under study. Is it right to qualify it as a philosophical category?

In our deep conviction, yes, it is legal. This is evidenced by the fact: all phenomena of reality (nature, society, consciousness) are in specific environments and experience their influence in the processes of existence, development and functioning. This gives us the right to qualify the category "environment" as a general scientific one. Speaking about

the environment in which a cognizable phenomenon exists, one can be convinced that the environment influences it in a very diverse way. These influences can be divided into three classes: "passively influencing cognizable phenomena, changing their external characteristics of form, phenomenon, properties; actively influencing them and leading to changes in the contents, essences and qualities of the objects of research". Finally, there are environmental phenomena that not only interact with cognizable phenomena, but in certain situations become elements of the latter. The first class of phenomena are conditions. The second class of phenomena are causes. The third class of phenomena is foundations. There is a triad: conditions - reasons grounds. Of course, these phenomena are in dialectical connections with each other: they interact, mutually penetrate each other, and can change their status, even to the point of mutual transformation. It is clear that only in the interests of science and knowledge do we strictly delimit them. In science there are philosophical categories of the same name that express the essence of the names of classes of phenomena. Everything seems strict and everything is clear. Despite the fact that there is a certain ontological basis for determining the essence of conditions, causes and grounds, in the scientific literature one can find a lot of interesting, contradictory and even subjectively arbitrary understanding of the "conditions", "reasons" and "grounds" of the categories. Let's pay attention.

There are conclusions that focus on considering conditions as circumstances, prerequisites that contribute to something. At the same time, they also consider conditions as the basis for the phenomena of processes.

One of the most common positions directs us towards understanding conditions as such "phenomena that are necessary for the occurrence of a given event, but in themselves do not predetermine it"².

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 182.

² Данильян О. Г., Тараненко В. М. Философия: учебник. М.: Эксмо, 2005. С. 240.

There are studies that believe that: "Conditions are a set of various factors that contribute to the generation of an effect by a cause, but do not themselves produce an effect".

It is impossible to ignore the position of those authors who identify conditions and causes. In particular, they write: "When any phenomenon occurs, a set of causes operates, which are called conditions" [7, c. 322]. Of course, the phenomena and causes of the phenomenon are functionally of the same order, closely related, and located in dialectical unity. At the same time, in fairness it should be noted: it is hardly legitimate to identify them.

Summarizing the above, we draw the following conclusions: a) the conditions are truly passive, and not active environmental phenomena; b) they are a necessary, but not the main link for the development and functioning of phenomena; c) conditions are necessary for the realization of the possibilities of causes as active environmental phenomena.

We gradually came to the conviction that causes are active conditions that cause changes in the contents, essences and qualities of phenomena. However, an analysis of the literature suggests discrepancies.

Thesis 1: "So, the cause should be interpreted as the interaction of bodies, elements, phenomena, generating a consequence - certain changes in the interacting elements, bodies, phenomena or causing a new phenomenon"2. This conclusion is interesting in that it is focused on understanding the nature of the causes that grow from the interaction of phenomena, as well as in that the causes are proposed to be considered as phenomena causing profound changes in the environment, up to the formation of new phenomena. At the same time, the above position seems to be not entirely correct in terms of an unambiguous connection between cause and effect. In real life, not only causes give rise to effects. The latter, as will be shown below, are the result Thesis 2: "Cause is a philosophical category to designate a phenomenon, a process that causes, causes another phenomenon, process"³. Of course, causes are one of the main factors that give rise to other phenomena, but they are not the only factors. Along with them, as already noted, conditions and grounds work. This position is replicated in works that categorically state: "A cause is the interaction of phenomena, objects, systems, in which one phenomenon (cause) gives rise to another (effect)" [1, c. 17].

Thesis 3: It is interesting because its authors connect the actions of causes to generate effects with certain conditions. Let us present this conclusion in a literal version: "When one phenomenon, under certain conditions, modifies or gives rise to another phenomenon, the first acts as a cause, the second as a consequence". This provision is, of course, more specific in terms of understanding the essence of the consequences.

Along with conditions and causes, there are phenomena that in certain situations become elements of cognizable phenomena. Such phenomena are the grounds for their development, forming the ontological basis of the philosophical category "foundation". Reflecting on the essence of the latter, resorting to the analysis of scientific literature, it is not difficult to notice the following.

Firstly, the named category does not appear on the pages of literature as often as it should. At the same time, there are sources that quite specifically reflect the attitude towards its content.

Secondly, there are sources that offer definitions of the category «base». In particular: "The basis, ... the reason for something, the main thing on which something is built, something is created, that which leaves the core, the core is the starting material for the formation of something..." [3, c. 216]. Fourthly, there are

of the "work" of both causes, conditions, and foundations.

Философия: учебное пособие / под ред. В. П. Кохановского. Ростов н/Д.: Феникс, 2001. С. 286.

² Философия: учебное пособие / под. ред 3. Т. Фокиной. М.: Вузовская книга, 2012. С. 320.

Данильян О. Г., Тараненко В. М. Философия: учебник. М.: Эксмо, 2005. С. 500.

Философия: учебное пособие / под ред. В. П. Кохановского. Ростов н/Д.: Феникс, 2001. С. 282.

interpretations of the foundations of phenomena through properties. In particular, one can come across the statement that the basis of phenomena is certain properties, signs or relationships that make their occurrence possible.

Fifthly, it seems to us that the categories "substance" and "substrate" have been unjustifiably forgotten, which actually reflect the essence of the foundations, the fundamental principles of everything that exists. In essence, they are the historical and philosophical determinant of the category "foundation". The latter takes its place in the triad: conditions causes - grounds. Thus, the category "foundation" reflects the totality of phenomena on the basis of which phenomena are formed and developed. In essence, the triad conditions - causes - grounds forms the process of determining the existence of phenomena. Determinism is a phenomenon that connects, integrates conditions, causes and foundations.

The integration of conditions, causes and reasons occurs differently in different situations. This gives us the right to talk about different ways of connecting them. These differing methods are directly related to determining the essence of such philosophical categories as "necessity", "randomness", and "nature of the phenomenon".

How do modern authors speak about the category "necessity"?

Firstly, all authors, without exception, rightly believe that necessities "grow" and are formed as a result of connections between phenomena. This conclusion will be confirmed by virtually all the provisions that will be given in this work.

Secondly, there is a point of view, the essence of which boils down to the following: "Necessity is a philosophical category that expresses the objective connections of the material world" [3, c. 217]. As can be seen in this edition, necessity is associated exclusively with material phenomena. If we accept this position as true, then the category "necessity" cannot be qualified as philosophical. The realities of life convince us that the necessary processes take place both in the material and in the spiritual world.

Thirdly, the most widely and widely expressed point of view in the scientific literature is that necessities are associated with internal laws, structure, and order. In a categorical edition, this position is presented as follows: "Necessity is such a development of phenomena that inevitably follows from the internal, essential properties and relationships of these phenomena" [9]. There is hardly any sufficient reason to associate necessity exclusively with the internal characteristics of phenomena. Without much difficulty one can be convinced that they arise as a result of an organic combination of both internal and external parameters of phenomena.

Synthesizing the content of the above premises with the essence of the real processes of existence, we can summarize: "a) necessities are specific types of combination of conditions, causes and grounds, and not just causes; b) necessities are types of connections not only of internal conditions, causes and grounds, but also external ones; c) necessity - actually operating mechanisms of existence, necessarily realized in the course of the emergence, development and functioning of phenomena; d) necessity and chance coincide, in many respects, in their content, being certain ways of connecting conditions, causes and grounds, but they differ radically in their functional orientation. It is possible to understand these differences only after the nature and essence of chance is determined".

However, it is necessary to formulate a definition of the category "necessity". It reflects the conditions, causes and grounds, connected in a certain way, creating the basis for the mandatory occurrence, development and specific functioning of phenomena.

Now let us pay attention to the main approach to the essence of randomness in the works of modern researchers: "randomness are connections between phenomena determined by secondary, unimportant factors"². Or: "randomness is something that is deter-

Кокорин А. А. Методология научных исследований: учебное пособие. М.: Московский государственный областной университет, 2015. С. 181.

Бучило А. Ф., Исаев И. А. История и философия науки: учебное пособие. М.: Проспект, 2021. С. 117.

mined not by an essence, but by a phenomenon, not by the general laws of the functioning and development of objects, but by individual factors, as a result of which an event may or may not occur" [5; 8]. As follows from the text, it is in many ways consonant with the previous position. True, it expresses even more deeply the statement that randomness are the product of the influence of single factors on phenomena.

Without going into other details of points of view existing in the literature, we will offer our vision of the essence of the philosophical category «randomness». Firstly, in our opinion, all phenomena of reality are a product of the action of necessities. Secondly, necessities differ significantly from each other, since they are formed as connections of different conditions, causes and grounds. Third, accidents are a product of the interactions of necessities.

Thus, the category "randomness" reflects an unexpected result that arises as a result of a collision of needs, changing the direction of development of phenomena in a certain subject area. This result is evidence of the "victory" of a "stronger" need over a "weaker" one.

When discussing the essence of philosophical categories, one cannot ignore the category "nature of a phenomenon". It is philosophical, since all phenomena of existence, without exception, have their own genesis. Natural phenomena, social phenomena and phenomena, human consciousness have genetic determination. It is this fact that allows us to consider this category as a general scientific one.

It is not difficult to understand that the phenomena of reality are formed as a result of the action of certain conditions, causes and foundations connected in certain ways. The latter form necessary and random processes. Their struggle ultimately leads to the emergence of certain phenomena. It would be a mistake to ignore these processes and not reflect them in the content of the philosophical category "nature of a phenomenon".

Facts suggest that every process and phenomenon arise because of the interaction of necessities and accidents. This picture can be presented as follows. Having arisen because of necessities, accidents begin to have a reverse

effect on the necessities that gave rise to them, with which they are in a state of struggle, since they are opposite to them. Based on this contradictory struggle between necessities and accidents, those necessities that are destined to "survive" are formed; it is they who play the role of shaping this or that phenomenon. Such needs are different from all others. They are universal in nature and shape phenomena. This is the necessity of necessities. It is legitimate to give this specific type of need its own «name». This is the nature of the phenomenon.

Ultimately, we come to the conclusion that the "nature of a phenomenon" is a philosophical category that reflects necessity (i. e., the connection of conditions, causes, grounds), which plays a major, fundamental role in the formation and emergence of a particular phenomenon. In modern science, there are discussions about the content of the philosophical category "possibility". There are many judgments in which this category is reflected in its own way.

Thus, possibility, and this is fair, qualifies as potential being. In some cases, it is presented not only as the potential existence of phenomena, but also as a tendency for the development of existing existence.

But there are researchers who, along with the above-mentioned signs of possibilities, see in them the prerequisites for the future state of phenomena. Let's not be unfounded, we will give one of the conclusions in this regard: "Possibility is the existence of a new thing in its potential state, it is an objective tendency of the formation of an object, a prerequisite for its future state".

An additional signal regarding the essence of possibilities is given by authors who in their works consider the possible and the impossible as proto-possibles. In this regard, the following conclusion should be given: "The impossible is something that does not correspond to the objective laws of the functioning and development of objects and cannot appear in a given system" [7, c. 325]. In our deep conviction, the main signs of the possible are: a) possibility is an event in potential; b) the

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possibility is organically connected with the trends in the development of phenomena; c) these trends are based on objective laws; d) possibility – a necessary process of occurrence of phenomena; e) possibility is the opposite of impossibility.

In a word, possibility is the existence of phenomena in its potential form, based on an objective, necessary basis. The latter, again, is formed by interrelated conditions, causes and grounds. The realized possibility turns into reality.

In philosophy there is a category of the same name, which is not always clearly interpreted. There are nuances in the interpretations that you should pay attention to. At the same time, we note: the essence of the category "reality" has already been discussed in one of the previous articles. It was considered in the context of its relationship with the categories "being" and "existence". Here it will be presented in a slightly different context – in relation to the category "opportunity". However, this will not be the basis for radical changes in the understanding of its content.

Firstly, there is an opinion that reality is the actual existence of something¹. It is obvious that in this context the category "reality" is interpreted through the concept of "existence".

Secondly, the priority and most widespread is the presentation of reality as a realized possibility.

Thirdly, in the scientific literature one can find the statement that reality is the existence of beings. In other words, in this premise reality is presented as the existence of the essence of phenomena. It seems to us that this conclusion is important because it focuses attention on the ontological basis of reality.

Fourthly, there are researchers who tend to believe that the concept of "reality" is used in the sense of the completeness of the manifestation of some quality. Obviously, such an approach is focused on searching for connections between reality and the quality of phenomena and processes of existence.

Fifthly, it is considered fair that reality is understood as the actual existence of phenomena.

What conclusions can be drawn by analyzing the above?

- 1. It is obvious that there is no complete unity in the interpretation of the essence of the category "reality".
- 2. Unjustified confusion of the contents of the categories "being", "existence", "reality" is allowed.
- 3. It is clearly not enough (although fair) to interpret reality as a realized possibility.
- 4. There is a basis for understanding reality as a reality that connects essential and inessential features of phenomena.

General conclusion: nevertheless, the most accurate authors are those who place reality above the being and existence of phenomena because it is nothing more than a manifestation of the essential features of phenomena. Thus, "reality" is a philosophical category that reflects the external manifestations of the essential features of actually existing phenomena.

Conclusion

Thus, on the basis of philosophical methodology, we examined in detail the content of some general scientific (philosophical) categories "form", "phenomenon", "property", "function", "character" (that is, categories that reflect the essence of the ways in which internal signs of phenomena are manifested in the environment), as well as "environment", "condition", "cause", "ground", "consequence", "necessity", "randomness", "nature of the phenomenon", "possibility" (categories reflecting the impact of the environment on the phenomenon under study) and give them a modern definition. In the future, we will consider the content and logical relationship of the categories "separate", "single", "special", "universal", "identity", "difference", "opposite", "contradiction", "struggle".

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Большой толковый словарь русских существительных / под ред. Л. Г. Бабенко. М.: АСТ-Пресс, 2008. С. 302.

ЛИТЕРАТУРА

- 1. Архангельская Н. О., Орлова И. И. Философские категории как методологический базис научных исследований // Философские и методологические проблемы исследования российского общества: сборник трудов VI Международной научной конференции, Москва, 25 ноября 2022 г. М.: Сам Полиграфист, 2022. С. 16–27.
- 2. Горбунов А. С., Мирошкин М. С. Методологические проблемы научных исследований: к вопросу о функциях науки // Философские и методологические проблемы исследования российского общества: сборник трудов V Международной научной конференции, Москва, 25 ноября 2021 г. М.: Российский университет транспорта (МИИТ), 2022. С. 106–116.
- 3. Колесниченко Ю. В. Методологический инструментарий научного исследования: способы и подходы // Философские и методологические проблемы исследования российского общества: сборник трудов V Международной научной конференции, Москва, 25 ноября 2021 г. М.: Российский университет транспорта (МИИТ), 2022. С. 215–222.
- 4. Колесниченко Ю. В., Архангельская Н. О. Неоклассика как этап развития науки // Философские и методологические проблемы исследования российского общества: сборник трудов VI Международной научной конференции, Москва, 25 ноября 2022 г. М.: Сам Полиграфист, 2022. С. 166–175.
- 5. Концепция модернизации системы дополнительного профессионального педагогического образования Новосибирской области / В. Я. Синенко, И. Л. Беленок, А. Н. Величко, М. Г. Волчек // Сибирский учитель. 2011. № 4 (77). С. 22–28.
- 6. Майкова В. П., Горбунов В. С., Наместникова И. В. Системный подход как основа научной методологии // Вестник Московского государственного областного университета. Серия: Философские науки. 2019. № 1. С. 148–158.
- 7. Песоцкий В. А., Колесниченко Ю. В. Исследование и его роль в научном познании // Философские и методологические проблемы исследования российского общества: сборник трудов V Международной научной конференции, Москва, 25 ноября 2021 г. М.: Российский университет транспорта (МИИТ), 2022. С. 322–332.
- 8. Синенко В. Я. Современная модель повышения квалификации работников образования // Профессиональное образование в России и за рубежом. 2009. № 1 (1). С. 91–93.
- 9. Development of Competitive Relations in the Russian Market of Educational Services / E. Y. Ivinskaya, A. A. Nikitin, A. S. Markovichev, A. Z. Zhafyarov, O. A. Milinis, G. N. Zhukov, V. Y. Sinenko, I. A. Mavrina // International Review of Management and Marketing. 2016. T. 6. № 1. C. 65–69.

REFERENCES

- Arhangel'skaya N. O., Orlova I. I. [Philosophical Categories as a Methodological Basis for Scientific Research]. In: Filosofskie i metodologicheskie problemy issledovaniya rossijskogo obshchestva: sbornik trudov VI Mezhdunarodnoj nauchnoj konferencii, Moskva, 25 noyabrya 2022 g. [Philosophical and Methodological Problems of Research of Russian Society: Collection of Proceedings of the VI International Scientific Conference, Moscow, November 25, 2022]. Moscow, Sam Poligrafist Publ., 2022, pp. 16–27.
- Gorbunov A. S., Miroshkin M. S. [Philosophical Categories as a Methodological Basis for Scientific Research]. In: Filosofskie i metodologicheskie problemy issledovaniya rossijskogo obshchestva: sbornik trudov V Mezhdunarodnoj nauchnoj konferencii, Moskva, 25 noyabrya 2021 g. [Philosophical and Methodological Problems of Research of Russian Society: Collection of Proceedings of the V International Scientific Conference, Moscow, November 25, 2021]. Moscow, Russian University of Transport (MIIT) Publ., 2022, pp. 106–116.
- 3. Kolesnichenko Yu. V. [Methodological Tools for Scientific Research: Methods and Approaches]. In: Filosofskie i metodologicheskie problemy issledovaniya rossijskogo obshchestva: sbornik trudov V Mezhdunarodnoj nauchnoj konferencii, Moskva, 25 noyabrya 2021 g. [Philosophical and Methodological Problems of Research of Russian Society: Collection of Proceedings of the V International Scientific Conference, Moscow, November 25, 2021]. Moscow, Russian University of Transport (MIIT) Publ., 2022, pp. 215–222.
- 4. Kolesnichenko Yu. V., Arhangel'skaya N. O. [Neoclassicism as a Stage in the Development of Science]. In: Filosofskie i metodologicheskie problemy issledovaniya rossijskogo obshchestva: sbornik trudov VI Mezhdunarodnoj nauchnoj konferencii, Moskva, 25 noyabrya 2022 g. [Philosophical

- and Methodological Problems of Research of Russian Society: Collection of Proceedings of the VI International Scientific Conference, Moscow, November 25, 2022]. Moscow, Sam Poligrafist Publ., 2022, pp. 166–175.
- 5. Sinenko V. Ya., Belenok I. L., Velichko A. N., Volchek N. G. [The Concept of Modernization of the System of Additional Professional Pedagogical Education in the Novosibirsk Region]. In: Sibirskij uchitel' [Siberian Teacher], 2011, no. 4 (77), pp. 22–28.
- Maykova V. P., Gorbunov V. S., Namestnikova I. V. [Systematic Approach as a Basis for Scientific Methodology]. In: Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Filosofskie nauki [Bulletin of Moscow Region State University. Series: Philosophy], 2019, no. 1, pp. 148–158.
- 7. Pesocky V. A., Kolesnichenko Yu. V. [Research and Its Role in Scientific Knowledge]. In: Filosofskie i metodologicheskie problemy issledovaniya rossijskogo obshchestva: sbornik trudov V Mezhdunarodnoj nauchnoj konferencii, Moskva, 25 noyabrya 2021 g. [Philosophical and Methodological Problems of Research of Russian Society: Collection of Proceedings of the V International Scientific Conference, Moscow, November 25, 2021]. Moscow, Russian University of Transport (MIIT) Publ., 2022, pp. 322–332.
- 8. Sinenko V. Ya. [Present-Day Model of Skills Level Improvement of Educational Personnel]. In: *Professional'noe obrazovanie v Rossii i za rubezhom* [Professional Education in Russia and Abroad], 2009, no. 1 (1), pp. 91–93.
- 9. Ivinskaya E. Yu., Nikitin A. A., Markovichev A. S., Zhafyarov A. Z., Milinis O. A., Zhukov G. N., Sinenko N. Yu., Mavrina I. A. Development of Competitive Relations in the Russian Market of Educational Services. In: *International Review of Management and Marketing*, 2016, vol. 6, no. 1, pp. 65–69.

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