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# SCIENCE AND MYTH CORRELATION IN THE PHILOSOPHY OF E. CASSIRER

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#### **INTRODUCTION**

#### **Relevance of the research**

The awareness of the neo-Kantians of the Baden and Marburg schools (W. Windelband, G. Rickert, P. Natorp, E. Cassirer, etc.) at the turn of the 19th–20th centuries of the illegality of applying natural scientific methods to the humanities led to the destruction of the methodological method which dominated in natural sciences. Due to this, neo-Kantian thought made a significant contribution to the justification of the humanities and contributed to the formation of such sciences as sociology, psychology, anthropology, etc.

Ernst Cassirer (1874–1945) is one of the most prominent representatives of Marburg neo-Kantianism. His works largely determined the final form of the neo-Kantian tradition, and made it possible to develop an interdisciplinary approach to the study of both the humanities and natural sciences. Cassirer's philosophical system presents the world of culture as a "symbolic universe" generated by a special type of symbolic forms. Such independent, closed, and autonomous symbolic forms are myth, religion, science, art and language. The German philosopher assigns a rather "modest" historical role to the scientific worldview created by the philosophers of the New Age and puts the natural-scientific mind of man at the head of philosophy in the form of a private form of worldview – a scientific symbolic forms allows, firstly, to distinguish the sphere of natural-scientific knowledge into a separate symbolic form, and secondly, to explore myth not as fiction and allegory, but as an integral and self-sufficient worldview, which has its own criterion of truth and a system of concepts about the world, thirdly, to compare myth and science and to give them a comparative characteristic.

Of particular relevance at present is the study of mythological forms of worldview, since in modern society there is an increased interest in the problem of myth. In modern intellectual and political discourse, there is a clear criticism of modernity, technology and consumer society and often we hear calls for the revival of a mythological and religious worldview. Such discourse is driven by a crisis of scientific rationality and the worsening technocratic lurch of culture. Cassirer proves that the representative of mythological consciousness lived in a more integral and organic world, filled with Sacred qualities, which had meanings of a higher order than the representatives of the scientific (profane) mindset.

The second aspect that allows us to talk about the relevance of research is the universality of Cassirer's symbolic theory and its interdisciplinary applicability. In the late XIX – early XX centuries, many philosophers talked about the crisis state of science. Philosophical schools such as neo-Kantianism, philosophy of life, intuitionism, phenomenology, traditionalism, existentialism and others in one form or another criticized modern scientific knowledge. The main problem that philosophers identified was that science completely separated itself from philosophy and fragmented into many contradictory and inconsistent sciences. The natural sciences "deform" the human worldview by eliminating their internal spiritual content of objects and increasing the scale of the creation of technology ultimately leading to total control over humanity.

Nevertheless, scientific knowledge itself does not see the crisis happening to it. Moreover, the concept of "science" is identified only with the natural sciences, which with greater intensity began to supplant the humanities, recognizing the latter as "pseudoscientific". Many researchers (for example, J. G. Harpham) describe such a process a "crisis of humanities". One of the manifestations of the crisis is the fact that positivistic approaches to natural sciences occupy a dominant position, and scientific consciousness recognizes only empirical explicit research methodologies.

The third aspect that determines the relevance of German philosopher works study is the lack of knowledge of his work. Various aspects of his work (language, myth, influence on the formation of the humanities) were investigated, but a full-scale analysis of the comparison of scientific and mythological types of worldview was not given.

## Current research on the subject

Ernst Cassirer (1874–1945) is a prominent representative of Marburg neo-Kantianism and "the last philosopher of culture" (as one of the researchers of his work, E. Skidelsky, named him<sup>1</sup>). Cassirer remains an influential philosopher of the twentieth century whose interest in research almost did not fade away throughout the second half of the last century. Research into the German philosophers' legacy began immediately after his death. Already in the late 40s, the first English-language collection of articles appeared, published in 1949 by The Philosophy of Ernst Cassirer, edited by P.A. Schilpp<sup>2</sup>. Cassirer researchers of the 50s – 70s are Carl H. Hamburg<sup>3</sup>, S. W. Itzkoff<sup>4</sup>, D. Lipton<sup>5</sup>, P. Gay<sup>6</sup>, C.O. Schrag<sup>7</sup>. In the early 70s Donald D. P. Veren<sup>8</sup> and his student J. Krois<sup>9</sup> worked on the archive of Cassirer's materials, which was at Yale University, where the philosopher worked from 1941 to 1944. In the 90s, there was a significant interest in Cassirer's philosophy in Germany. Researchers such as Thomas Knoppe should be mentioned<sup>10</sup>, E. W. Orth<sup>11</sup>, O. Schwemmer<sup>12</sup>, A. Graeser<sup>13</sup>, H. Paetzold<sup>14</sup>, E. Skidelsky. In the Soviet Union, the first researchers of Cassirer's theories were A. F. Losev<sup>15</sup> and K. Svasyan<sup>16</sup>. In the 90s, Cassirer's research was carried out by R. N. Parkhomenko<sup>17</sup>, in

<sup>&</sup>lt;sup>1</sup> Skidelsky E. Ernst Cassirer: The Last Philosopher of Culture. Princeton: Princeton University Press, 2008. 288 p.

<sup>&</sup>lt;sup>2</sup> Schilpp P. A. The philosophy of Ernst Cassirer. Evanston, Illinois: The Library of Living Philosophers, 1949. 936 p.

<sup>&</sup>lt;sup>3</sup> Hamburg C.H. Symbol and Reality: Studies in the Philosophy of Ernst Cassirer. The Hague: Martinus Nijhoff, 1956. p. 172.

<sup>&</sup>lt;sup>4</sup> Itzkoff S. W. Ernst Cassirer: scientific knowledge and the concept of man. Notre Dame, Indiana: University of Notre Dame Press, 1971. 286 p.

<sup>&</sup>lt;sup>5</sup> Lipton D. R. Ernst Cassirer: The dilemma of a liberal intellectual in Germany, 1914-1933. Toronto: University of Toronto Press, 1978. 228 p.

<sup>&</sup>lt;sup>6</sup> Gay P. The social history of ideas: Ernst Cassirer and After // The critical spirit. Essays in Honor of Herbert Marcuse. Boston: Beacon Press, 1967. P. 106-120.

<sup>&</sup>lt;sup>7</sup> Schrag C.O. Heidegger and Cassirer on Kant // Kant-Studien. 1967. Bd. 58. S. 87–100.

<sup>&</sup>lt;sup>8</sup> Veren D.F. Kant, Hegel and Cassirer. Origin of the Philosophy of Symbolic Forms // Cassirer E. Kant's Life and Teachings. St. Petersburg: University Book, 1997. P. 405–421 (In Russian).

<sup>&</sup>lt;sup>9</sup> Krois J.M. Cassirer: Symbolic Forms and History. New Haven, Connecticut: Yale University Press, 1987. 262 p.

<sup>&</sup>lt;sup>10</sup> Knoppe T. Die theoretische Philosophie Ernst Cassirers. Hamburg: Felix Meiner, 1992. 204 s.

<sup>&</sup>lt;sup>11</sup> Orth E. W. Ernst Cassirer as cultural scientist // Synthese, 2011. Vol. 179 (1). P.115-134.

<sup>&</sup>lt;sup>12</sup> Schwemmer O. Ernst Cassirer: ein Philosoph der europäischen Moderne. Berlin: Akademie Verlag, 1997. 265 s.

<sup>&</sup>lt;sup>13</sup> Graeser A. Ernst Cassirer. Munich: C.H. Beck, 1994. 234 p.

<sup>&</sup>lt;sup>14</sup>Paetzold H. The Symbolic Language of Culture, Fine Arts and Architecture: Consequences of Cassirer and Goodman: Three Trondheim Lectures. Trondheim: FF Edition, 1997. 61 p.

<sup>&</sup>lt;sup>15</sup> Losev A.F. Theory of mythical thinking by E. Cassirer // Cassirer E. Favorites. An Essay on Man. M.: Gardarika, 1998. P. 730-760. (In Russian).

<sup>&</sup>lt;sup>16</sup> Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. Er.: Publishing House of the Academy of Sciences of the ArmenianSSU, 1989. 238 p. (In Russian).

<sup>&</sup>lt;sup>17</sup> Parkhomenko R.N. Man as a Subject of Culture in the Philosophy of E. Cassirer: dis.... cand. phil. sciences. M., 1999. 152 p. (In Russian).

the 2000s by I.I. Evlampiev<sup>18</sup>, A.A. Kravchenko<sup>19</sup>, M.E. Soboleva<sup>20</sup>, A.V. Weinmeister<sup>21</sup>, O.V. Knizhnik<sup>22</sup>, M.V. Demidova<sup>23</sup>, S.A. Shilova<sup>24</sup>, A.V. Isaeva<sup>25</sup>. In the 2010s – such as B.L. Gubman<sup>26</sup>, etc.

The object of the study – theoretical philosophy of E. Cassirer.

**The subject of the study** – the correlation between myth and scientific mindset in the philosophy of E. Cassirer.

### The goal and the tasks of the research

The purpose of the dissertation is a historical and philosophical analysis of the philosophy of E. Cassirer in order to analyze the structures of mythological and scientific forms of cognition and their comparison.

To achieve this goal, the following tasks were solved:

- 1. To determine the prerequisites of the emergence of E. Cassirer's philosophy of culture and define the main concepts;
- 2. To describe the structure and function of the language in the development of symbolic forms;
- 3. To describe the essence and origin of "Sacred". To determine the connection between myth and language;
- 4. To compare mythological consciousness and scientific mindset. To identify their structure and differences.

<sup>&</sup>lt;sup>18</sup> Evlampiev I.I. The Formation of European Non-Classical Philosophy in the Second Half of the XIX – Early XX Centuries: a Textbook. St. Petersburg: Publishing House of St. Petersburg University, 2008. 226 p. (In Russian).

<sup>&</sup>lt;sup>19</sup> Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge: dis.... doc. phil. sciences. M., 2000. 366 p. (In Russian).

<sup>&</sup>lt;sup>20</sup> Soboleva M.E. Philosophy of Symbolic Forms E. Cassirer and the Formation of non-Classical Philosophy: dis.... cand. phil. sciences. St. Petersburg, 2000. 161 p. (In Russian).

<sup>&</sup>lt;sup>21</sup> Weinmeister A.V. Symbolic Interpretation of Culture in the Concept of E. Cassirer and A.F. Losev: dis.... cand. phil. sciences. St. Petersburg, 2006. 194 p. (In Russian).

<sup>&</sup>lt;sup>22</sup> Knizhnik O. V. Ernst Cassirer's Symbolic Universe: dis.... cand. phil. sciences. M., 2007. 153 p. (In Russian).

<sup>&</sup>lt;sup>23</sup> Demidova M.V. Man as an "Animal Symbolicum" in the Philosophy of Culture of E. Cassirer: Historical and Philosophical Analysis: dis.... cand. phil. sciences. Saratov, 2008. 175 p. (In Russian).

<sup>&</sup>lt;sup>24</sup> Shilova S. A. The Problem of Language in the Symbolic Idealism of E. Cassirer: dis.... cand. phil. sciences. Saratov, 2008. 195 p. (In Russian).

<sup>&</sup>lt;sup>25</sup> Isaeva A.V. Myth in the Philosophy of E. Cassirer: dis.... cand. phil. sciences. Saratov, 2011. 173 p. (In Russian).

<sup>&</sup>lt;sup>26</sup> Gubman B. L. Contemporary Philosophy of Culture. M.: "Russian Political Encyclopedia" (ROSSPEN), 2005. 536 p. (In Russian).

## The scientific novelty of the research

1. The connection of Husserl's early philosophy with the basic principles of cultural philosophy mentioned in Cassirer's work "Philosophy of Symbolic Forms" was revealed;

2. A detailed description is given of Cassirer's understanding of the process of forming the categories of "Sacred" and "Profane", and their connection with the structures of the language and their role in shaping the mythological mindset;

3. The bidirectional nature of perception in the philosophy of E. Cassirer is described, leading to the formation of opposite ideas about objective reality (the "objective" and "living" world);

4. Cassirer's concept is analyzed in detail, describing the process of transition of consciousness from a mythological mindset to a religious one, and from it to a scientific mindset;

5. A detailed comparative description of the myth (mythological mindset) and the scientific mindset in the philosophy of E. Cassirer is given.

## Theoretical and practical significance of the results obtained in the thesis

The philosophy of E. Cassirer has independent theoretical and practical significance and is essential for modern humanitarian knowledge, since it is able to reveal the origins and features of both scientific and religious worldviews. In addition, the results of this study can become the basis for further developments in the field of cultural studies, the history of the philosophy of science, phenomenology, religious studies and anthropology. The materials and conclusions of the dissertation can be used in the process of teaching philosophy, cultural studies, religious studies, and other disciplines.

## Approbation of the results the research

The main theoretical provisions and results of the dissertation are confirmed by approbation at the following conferences and seminars:

1. International Conference. University. Education. Society. (to the 300th anniversary of St. Petersburg State University). St. Petersburg State University. Institute of Philosophy. St. Petersburg, November 16-17, 2023, St. Petersburg.

2. International scientific seminar "Transcendental turn in modern philosophy – 9: epistemology, theory of consciousness, cognitive science and artificial intelligence", GAUGN, RSUH, April 11–13, 2024, Moscow.

3. All-Russian conference with international participation "Studies of religion: past, present, future", PSTGU. April 26-27, 2024, Moscow.

### **Published works**

The main provisions and results of the dissertation research are reflected in 3 published scientific papers of peer-reviewed scientific publications recommended by the Higher Attestation Commission:

 Bondarev D.E. German neo-Kantianism on the Essence of Modern Science and the Need to Transform its Philosophical Foundations // Bulletin of the University of Tver.
 — 2023. — № 1(63). — P. 228–242;

2. Bondarev D.E. "Sacred" and "Profane" in the Philosophy of E. Cassirer // Bulletin of the University of Tver. — 2023. — № 3(65). — P. 137–153;

Bondarev D.E. The Role of the "Symbolic Function" in the Formation of the Scientific Mindset in the Philosophy of E. Cassirer // Nauchnoe mnenie. — 2024. — № 6. — P. 30–38.

## The structure of the thesis

The dissertation consists of an introduction, three chapters, a conclusion, six figures, four tables, and a list of references. At the end of the dissertation, the main results of the work are presented, and its theoretical and practical significance is indicated. The list of references includes 109 titles of works by Russian and foreign authors.

### Main scientific results

1. Based on Cassirer's early philosophy, it is shown that in modern natural sciences, scientific concepts are created on the basis of a creative cognitive act of consciousness, which fixes the ratio between abstract objects<sup>27</sup>. This way of cognition replaces sensory

<sup>&</sup>lt;sup>27</sup> Bondarev D.E. German neo-Kantianism on the Essence of Modern Science and the Need to Transform its Philosophical Foundations // Bulletin of the University of Tver. 2023. № 1(63). P. 236. (In Russian).

diversity with mathematical, which leads to the isolation of the subject from the true reality given to him through feelings.

2. In Cassirer's philosophical concept, the "Sacred" is the main element constituting the mythological worldview – a symbol that allows us to combine contemplated objects into concepts according to the principle of identity of essence<sup>28</sup>.

3. Using the concept of a symbolic function introduced by Cassirer in the Philosophy of Symbolic Forms, the process of forming a scientific mindset<sup>29</sup> is described. The scientific mindset is formed on the basis of religious mindset, and it is based on the mythological type of consciousness.

#### The main provisions for the thesis defence

1. E. Cassirer in his first major work "The Concept of Substance and the Concept of Function" criticizes the Aristotelian method of forming concepts through the comparison and identification of predicates of real objects. Here the identical is distinguished and fixed and the different is discarded. Cassirer proposes a different method which it is not the comparison of real objects (substances) that comes to the fore, but the functional relationships between abstract objects. The concept is defined by a function connecting the terms of some manifold in a series using some basic relation. The form of the concept in this case determines the constancy of this relationship, and not the identity of the properties of the objects.

2. Starting the analysis of culture, Cassirer says that natural science in its development has highlighted the category of causality in the analysis of the studied phenomena, which is based on the decomposition of all phenomena into spatially separated elements and into states separated in time. For cultural objects, the causal relationship of phenomena over time is of less importance than their integral form, which persists within temporal dynamics. In this regard, Cassirer returns to the concept of form, originating from Aristotle's philosophy, as a way of knowing the integrity of an object.

<sup>&</sup>lt;sup>28</sup> Bondarev D.E. "Sacred" and "Profane" in the Philosophy of E. Cassirer // Bulletin of the University of Tver. 2023. № 3(65). P. 150. (In Russian).

<sup>&</sup>lt;sup>29</sup> Bondarev D.E. The Role of the "Symbolic Function" in the Formation of the Scientific Mindset in the Philosophy of E. Cassirer // Nauchnoe mnenie. 2024. № 6. P. 36. (In Russian).

Form is a principle of organizing an integral object of culture, in which diverse particular content is not eliminated by the general, but is included in the general as its diverse content.

3. Cassirer based his concept of culture on the ideas of many philosophers from Plato to E. Husserl. The most significant is the influence of Goethe, Hegel and Husserl. Among Goethe's philosophical ideas, the most important for Cassirer was the idea of "primordial phenomenon" as an empirical manifestation of the hidden metaphysical basis of the unity of many phenomena of nature and culture. From Hegel's system, Cassirer turned out to be the closest to the idea of a natural development of the spirit, although Cassirer does not accept the Hegelian systematics of the stages of development of the spirit and the presence of a final form. In Husserl's philosophy, the most important turned out to be the concept of the natural series of numbers as a universal form of organization and comprehension by our consciousness of any subjective manifold; the natural series of numbers has become an elementary example, helping to understand how a symbolic function acts, structuring an integral symbolic form.

4. At the center of Cassirer's philosophy of culture is the concept of symbol; it is defined here as sensory perception, which consciousness endows with an ideal value, given exclusively by the internal intentions of consciousness itself. Symbol systems, organized by symbolic function in series and in symbolic form, structure an indefinite sensual reality and turn it into a world endowed with meanings.

5. The most important and universal symbolic form is language. In its development, language goes through three stages: mimetic, analogous and symbolic. At the first stage, the sense data is inextricably linked with the meaning attributed to it, so consciousness is not yet able to separate itself from the flow of sensual impressions. At the second stage, the ideal value separates from sensuality and forms a system of representations that are subject to the categories of space, time, and number; consciousness (the "self" of the subject) is separated from the world. At the third stage, the language forms concepts, first fixing the quality of each object by selecting one or more of its properties (turning into an object symbol) according to a certain criterion set by the consciousness itself, and then

building a series of objects using functions that set natural relationships of qualities of different objects.

6. The source of the mythological symbolic form lies in the presence of two directions in the primary relation of consciousness and objective reality (in Cassirer's terminology, the subject and emotional directions. It is the direction from consciousness to the object, generating involves the creation of broad categories of similar entities lacking distinct individual essences. And the second is the direction from object to consciousness, giving rise to the image of the "living" world, consisting of "beings" with an individual essence and therefore similar to man. The second direction of perception absolutely prevails in the mythological mindset; the first dominates in the scientific mindset. The dialectical relationship of these two directions in the real relation of consciousness to the world forms the categories of Sacred and Profane, which, expressed in language, structure the mythological and religious mindsets.

7. The human spirit in its development goes through three main stages associated with the inclusion of increasingly complex symbolic functions. At the first stage (at the stage of expression), myth acts as a symbolic function, it does not reflect the objective world, but creates it, forms the basic level of sensory perceptions endowed with ideal meaning in accordance with some semantic model previously formed by consciousness. At the second stage (presentation stage), language is included as the main symbolic function, meaning is separated from sensory perception and forms a level of stable representations in which subject content begins to prevail over emotional; the mythological mindset is being replaced by a religious one. At the third stage (designation stage), a logical-discursive symbolic function is included, which replaces objects with relationships that themselves line up in a series, and form strict scientific concepts, already completely devoid of contact with the basic level of sensory perceptions; a strictly scientific mindset is formed, in which sensory perceptions and representations of objects are replaced by their abstract symbolizations, devoid of internal essence.

# CHAPTER 1. DEVELOPMENT AND BASIC CONCEPTS OF PHILOSOPHY OF CULTURE OF E. CASSIRER

#### **1.1. Prerequisites of the Emergence of neo-Kantianism**

In the period from the middle of the 19th century to the beginning of the 20th century, a new philosophical trend was born in Germany. It was neo-Kantianism. Its purpose was to give a critical view of positivism and materialism, to connect natural sciences and philosophy, and to provide a rigorous rationale for scientific knowledge. It was also necessary to draw a demarcation line between the humanities and the natural sciences, and show that they differ not so much in subject as in the way of knowledge.

In the epistemology of I. Kant, the essence of the process of cognition is that consciousness reveals the structure of the previously accomplished process of constructing cognizable objects by consciousness itself. This construction begins with a sense data of consciousness system, on which forms of sensuality (space and time) a priori are superimposed. The set of sense data is structured into the form of perceptions and then falls into the sphere of rational cognition, where through transcendental categories of reason (quality, quantity, attitude, modalities, etc.) they are formed into a subject's world, in relation to which cognition becomes possible. Because knowledge is the all stages design process sequential description it can be divided into the same stages. Kant writes about this: "All our knowledge begins with feelings, then passes to reason and ends in mind, above which there is nothing in us to process the material of contemplation and to conduct it under the highest unity of thinking"<sup>30</sup>.

According to Kant, the process of scientific knowledge is the identification of the laws of action of our mind, structuring sense data and constructing the world. In other words, science does not determine laws to which things outside of us obey, but establishes laws that the mind itself possesses; these laws must include its a priori transcendental forms and categories. At the same time, for the subject to create objects in his mind, thinking alone is not enough, first of all, sensuality is necessary; this means that the

<sup>&</sup>lt;sup>30</sup>Kant I. Critique of Pure Reason. M.: Nauka, 1999. P. 287. (In Russian).

constructed object will necessarily have a visual representation. Kant's "principle of visibility" is related to the fact that the primary source of our knowledge is experience and sensation. According to Kant, if sense data were absent, then the a priori categories of reason would not make any judgment about the subject and the world would not be constructed.

Even abstract concepts of mathematics created before experience have a basis for their existence in the form of potential visibility in experience. Kant wrote: "Hence the need to make any abstract (abgesonderten) concept sensual, that is, to express the object corresponding to it in a visual representation, because without this [condition] the concept (as they say) would be meaningless (ohne Sinn), that is, it would remain devoid of meaning. Mathematics satisfies this requirement through the construction of an image, which is a phenomenon upcoming to our feelings (albeit created a priori). In the same science, the concept of quantity acquires meaning and support in a number, and the number [relies] on the [representation] of fingers, knuckles of accounts or sticks and dots [perceived visually]. This concept, together with all synthetic foundations or formulas [arising] from it, always remains created a priori, but their application and attitude to possible objects can only be found in the end in the experience, the possibility of which (as regards form) a priori is contained in it"<sup>31</sup>. As we can see, Kant suggests that cognition should begin with sense data, and, therefore, the clarity of cognitive forms and images is fundamental.

Neo-Kantians follow Kant in that the knowable object is constructed by the subject himself, but they refuse unconditional reliance on sensual, visual data. This is especially evident in relation to mathematical objects: by their very definition, they are abstract constructs, the process of creating which does not require the participation of sensuality.

The space of our subject world, according to Kant, we can comprehend ("to grasp" in Kant's terminology) not only in pure contemplation, but also through sensually visual intuition. The most important quality of space is its three-dimensionality, Kant explains precisely through the structure of sensual contemplation: "That complete space (i.e. not

<sup>&</sup>lt;sup>31</sup> Ibid. P. 250.

limiting itself to another space) has three dimensions and that space cannot have more dimensions at all – this relies on the position that at one point no more than three lines can intersect at right angles; and this position cannot be proved from concepts in any way, but it is based directly on contemplation and, moreover, on a pure a priori, since it is reliably apodictic"<sup>32</sup>. In this reasoning, Kant appeals to pure contemplation, but in fact he means a kind of generalization of sensual contemplations of space, in which the qualities of visual sensory images are given the status of inherent, essentially defining space. As the development of mathematics showed, Kant was mistaken, three-dimensionality is an inherent and particular, and not an essential property of the general concept of space. This idea made mathematicians shift the emphasis in defining space from sensual intuition (a priori) to mind; in the logic of Kant's philosophy, this means that space is a form of cognitive activity of the mind, the transition to such an understanding of space was carried out by the neo-Kantians<sup>33</sup>. Neo-Kantianism historically<sup>34</sup> arises during a period of new investigations in mathematics and physics, when a number of new types of space appear: non-local spaces, multidimensional spaces, non-Euclidean geometries, etc. All these discoveries are an important factor in favor of the neo-Kantian shift in understanding space.

But the biggest shift that neo-Kantianism makes in science understanding and its worldview is the recognition of all forms of scientific knowledge as subjective instruments of our human knowledge, and not a reflection of the objective properties of objects. E. Cassirer writes in the first volume of the "Philosophy of Symbolic Forms": "The fundamental concepts of each science, the means by which it raises questions and formulates conclusions, are no longer passive reflections its being, but in the form of intellectual symbols created by man himself"<sup>35</sup>.

<sup>&</sup>lt;sup>32</sup> Kant I. Prolegomena to any future metaphysics that can appear as a science // Kant I. Writings in Six Volumes. M.: Thought, 1965. Vol.4. P.1. P.100. (In Russian).

<sup>&</sup>lt;sup>33</sup> Gaidenko P.P. Scientific Rationality and Philosophical Reason. M.: Progress-Tradition, 2003. P. 364. (In Russian).

<sup>&</sup>lt;sup>34</sup> In the history of philosophy, the beginning of neo-Kantianism started with the slogan "Back to Kant!" which was formulated by the German philosopher Otto Liebmann in the work "Kant and Epigones" in 1865.

<sup>&</sup>lt;sup>35</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. M.; St. Petersburg: University Book, 2002. P.12. (In Russian).

Neo-Kantianism included two schools: Freiburg (Baden), led by G. Rickert and W. Windelband, and Marburg, led by G. Cohen, E. Cassirer and P. Natorp. Despite significant differences in philosophical constructions, both schools were based on the same starting point: scientific concepts in the natural sciences do not reflect, but "distort" empirical reality; more precisely, they replace reality itself with a certain model.

One of the most prominent representatives of Marburg neo-Kantianism – Ernst Cassirer – in an original way was able to present a scientific mindset only as a special case of worldview. He managed to philosophically substantiate the independence and autonomy of the mythological and religious worldviews. Myth, religion, art and science in Cassirer's philosophy is presented as integral, autonomous and self-contained symbolic forms. Let us now consider – "Cognition and Reality" (1910), where the most important concepts of *the series* and *the function* were first introduced, which later became central to his entire work.

#### 1.2. Early Philosophy of E. Cassirer. Function-concept. Series-concept

Cassirer's career can be conditionally divided into three stages. The first stage is the neo-Kantian period of creativity, apprenticeship with the founder of neo-Kantianism, Hermann Cohen. During this stage, Cassirer conducted research in the field of natural sciences. The main works of this stage are: "The Leibniz system in its scientific foundations" <sup>36</sup> (1902), "Cognition and Reality" <sup>37</sup> (1910), "Einstein's Theory of Relativity" <sup>38</sup> (1921). The second stage is research in the field of philosophy of culture. This is the period when "Philosophy of Symbolic Forms" was written<sup>39</sup> in three volumes (1923–1929). During the third phase, research in anthropology and sociology was conducted. This is the period of publication of such basic works as "The Logic of Cultural

<sup>&</sup>lt;sup>36</sup> Cassirer E. Leibniz' System in seinen wissenschaftlichen Grundlagen. Marburg: Elwert, 1902. 548 s.

<sup>&</sup>lt;sup>37</sup> Cassirer E. Cognition and Reality. The Concept of Substance and the Concept of Function. M.: ITDGK "Gnosis," 2006. 400 p. (In Russian).

<sup>&</sup>lt;sup>38</sup> Cassirer E. Einstein's Theory of Relativity. M.: LIBROKOM Book House, 2009. 144 p. (In Russian).

<sup>&</sup>lt;sup>39</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. M.; St. Petersburg: University Book, 2002. 272 p. (In Russian).

Sciences<sup>40</sup> (1942), "An Essay on Man<sup>41</sup> (1944), "The Myth of the State<sup>42</sup> (1946). Cassirer's philosophy should be considered as an integral system, the philosophical views of the German philosopher from stage to stage did not change radically, but were refined and deepened.

The most important work of the early stage of Ernst Cassirer's work is the book "Cognition and Reality", which was published in 1910. On the first pages of this work, the philosopher criticizes the formal logic of Aristotle, because it leads to the incorrect interpretation of the process of formation of the concept. Aristotelian logic is based on Aristotelian metaphysics, the basic element of which is the idea of a *substance* existing independently of the cognizing subject. An isolated and self-contained substance is a stronghold of scientific knowledge in the Aristotelian system. The concept of substance describes specific independent objects that are directly given to us in sensory experience. It is their science that Aristotle fixes in the system of generic concepts. In Aristotle's philosophy, "*The concept* is not something alien to the world of sensual reality, it forms *part* of this reality itself<sup>243</sup>.

The basis for the formation of such a concept is the allocation of the main essential property *common* to the entire variety of things presented. Highlighting common properties allows us to combine things into classes by consistently comparing sensory manifolds, in which only *similarity* is held and left and the features with which they differ are discarded: "*Reflection* turned to one object, then to another <...> leads <...> to abstraction <...> [and] cleans <...> of various impurities of dissimilar components"<sup>44</sup>. Thus, in the Aristotelian system, ascending the ladder of generic concepts, "the substance unfolds sequentially its particular forms of being sequentially."<sup>45</sup>. As you move up the genera, the volume of the described objects increases, but their content decreases. The final point in this process is the establishment of the most general concept, already almost

<sup>44</sup> Ibid. P. 11.

<sup>&</sup>lt;sup>40</sup> Cassirer E. Favorites. An Essay on Man. M.: Gardarika, 1998. 784 p. (In Russian).

<sup>&</sup>lt;sup>41</sup> Cassirer E. Favorites. Logic of Cultural Sciences. M.; St. Petersburg: Center for Humanitarian Initiatives, 2016. 400 p. (In Russian).

<sup>&</sup>lt;sup>42</sup> Cassirer E. The Myth of the State. New Haven: Yale University Press, 2008. 303 p.

<sup>&</sup>lt;sup>43</sup> Cassirer E. Cognition and Reality. The Concept of Substance and the Concept of Function. P. 11. (In Russian).

<sup>&</sup>lt;sup>45</sup> Ibid. P. 13.

devoid of content. Cassirer writes: "The 'pyramid of concepts' we build in this way ends at the top with an abstract idea of 'something' <...>, which <...> is at the same time devoid of any specific meaning"<sup>46</sup>. The specified logical process, going in the direction of generalization of objects, reduces the individual qualities of the object, "thinking <...> all the time moves in the area of negations alone"<sup>47</sup>.

Cassirer notes that the basis of generic concepts, determined by the identification of the similarities of objects, is not a substance, but a mental *act* of their *identification*. In other words, thinking performs *the function* of comparing two sensory experiences, recognizing them as identical: "the task of thinking is only to extract from a number of perceptions  $\alpha\alpha$ ,  $\alpha\beta$ ,  $\alpha\gamma$ ... common element  $\alpha$ "<sup>48</sup>. From this Cassirer's conclusion it follows that the support for the concept is not the substance itself, which we learn on the basis of sensory experiences, but *the logical function* of our thinking, which compares experiences in time.

For Aristotle the category of ratio was not basic and fundamental, but was relative and secondary. Cassirer criticizes the doctrine of the concept of Aristotle for the fact that the process of its formation is accompanied by a search only for *similarities*, but not *differences*. Cassirer makes an important conclusion: any formation of concepts is associated with *a certain form of formation of a series:* "We say that some sensual variety is logically comprehended and ordered when its members are not next to each other without any mutual relations, but flow out and are arranged in the necessary order according to some creative basic *ratio* (author's italics – *D.B.*) from one certain initial term. *The identity* of this creative ratio, which remains unchanged with all the variety of individual contents of consciousness, constitutes a specific form of the concept"<sup>49</sup>.

Cassirer is sure that we would get a completely different scientific concept if it would consider *the difference* between consecutive terms: "The ratio of the elements of series a, b, c... created not thanks to some new element, which seems to be connected with

<sup>&</sup>lt;sup>46</sup> Ibid. P. 12.

<sup>&</sup>lt;sup>47</sup> Ibid. P. 26.

<sup>&</sup>lt;sup>48</sup> Ibid. P. 21.

<sup>&</sup>lt;sup>49</sup> Ibid. P. 20.

them in a tangible way, but thanks to the rule of following, moving from one member to another, kept unchanged for all members. F (a, b), F (b, c)..., giving the type of dependence between the next one after the other members of the series, obviously is not the member of the series itself, arising and developing in accordance with it"<sup>50</sup>. Cassirer gives the following definition of *the function*: "Each function is some general law that covers itself, thanks to the sequential values that the variable can take, all the individual cases to which it applies"<sup>51</sup>. Thus, the interpretation of the essence of the concept proposed by Cassirer is based on *the law of coordination of the elements of the series*. The most important is the first member of the series and the law of ratio between two consecutive members.

Cassirer, polemicizing on the pages of "Cognition and Reality" with Aristotle, eventually deduces into the definition of the essence of the concept of function as an alternative to the concept of *substance*, which was so firmly entrenched for several centuries until the era of the New Age: "Against the logic of the generic concept, which, as we have seen, is under the sign and domination of the concept of substance, *the logic of the mathematical concept of function* is put forward"<sup>52</sup>. Cassirer concludes that such a function can be found not only in the field of mathematics, but also in other natural sciences: physics, chemistry, etc., since the function "contains a general scheme and a model by which the modern concept of nature was created in its progressive historical development"<sup>53</sup>.

Cassirer emphasizes that the definition of a concept through a function has a completely different nature and purpose compared to its traditional definition. Aristotle's concepts "compress" the variety of reality to a certain extract and emasculate its content. The use of the function, on the contrary, according to Cassirer, *creates* a variety of reality, a ratio between conceivable images: "Naked 'abstraction' here is opposed by a peculiar *act of thinking* (author's italics – *D.B.*), free creativity of certain ratios"<sup>54</sup>. The definition

- <sup>52</sup> Ibid. P. 29.
- <sup>53</sup> Ibid. P. 29.

<sup>&</sup>lt;sup>50</sup> Ibid. P. 22.

<sup>&</sup>lt;sup>51</sup> Ibid. P. 34

<sup>&</sup>lt;sup>54</sup> Ibid. P. 18.

of the concept through the function that Cassirer offers should "grab" everything special in the subject, while the traditional definition of the concept, on the contrary, seeks to discard it.

For example, the Aristotelian method gives a number of specific concepts: birch, tree, plant, living organism – in which the content of the concept decreases, and the concepts are strictly included in each other. In contrast, the concepts of a mathematical point, line, plane, three-dimensional figure, which the mathematician operates, do not have such ratios, they do not form a hierarchical series and are not included in each other, they relate through certain functions: a line is obtained through the movement of a point, a plane – through the movement of a line, etc. In the first case, through a sequence of concepts, the world is extremely simplified, all a specific variety of objects is removed from it; in the second case, there is not so much simplification as the transformation of the world, its replacement by a specially organized model, which preserves the original diversity and therefore is much more effective for its cognition.

The traditional formation of concepts is due to the fact that our consciousness is not able to grasp all the specific features of the object. In memory, we only store its homogeneous image, which we use when analyzing and comparing with another object. *The general thing* that the logic of the Aristotelian concept distinguishes in the definition of the concept that Cassirer gives should become *variable*, and therefore the features that are insignificant to the essence of the subject should be preserved. Thus, by turning a concept into a function, all the variety of reality in its integrity would be held: "We do not go from a series  $a\alpha_1\beta_1$ ,  $a\alpha_2\beta_2$ ,  $a\alpha_3\beta_3$  directly to their *common* constituent *a*, but imagine that the whole set of individual terms *a* is given through some variable *x*, and the set of terms through a variable expression *y*. Thus, we cover the entire system in an expression *axy*..., that, through continuous changes, can be translated into a specific integrity of the members of the series and which therefore fully depicts the composition and logical division"<sup>55</sup>.

<sup>&</sup>lt;sup>55</sup> Ibid. P. 27.

At the same time, it is fundamentally important for Cassirer to distinguish between two types of objects: objects of the first order, as objects of sensory perception, and objects of the second order, as objects determined by the type of *connection* that occurs when compared with other objects: "Objects of sensory perception <...> are now opposed to "objects of the second order" the logical originality of which is determined exclusively by the type of connection from which they come out"<sup>56</sup>. According to Cassirer, only concepts describing second-order objects (for example, mathematical objects or physical ideal objects – the center of gravity, ideal gas, force field, etc.) are strictly scientific, so as science developed, they gradually began to supplant concepts describing first-order objects. The process of turning objects of the first kind into the second can be clearly seen in the modern era in the scientific ideas and statements of Kepler, Galileo, Descartes, Newton and Leibniz, which means the gradual accession of a rational type of thinking<sup>57</sup>. So Leibniz argued that truth lies in the field of mathematical signs, i.e. in the ratios between ideas, and not in specific concepts related to sensory images of things.

Objects of the second kind, expressing the form of connection of objects, and not their sense data of the substance, are the result of the work of our thinking. Thus, Cassirer says, objects do not exist independently of us as substance, and "we do not know 'objects' – this would mean that they are earlier and independently *defined* and given *as objects* but *substantively*"<sup>58</sup>.

Casirrer in his early philosophy comes to an important conclusion: the use of series and function to define concepts allows us to describe not only the process of formation of concepts in *the sciences of nature*. The series and function are also formative in *the sciences of culture*, which must explain myth, religion, art, language, etc. Let us now consider how Cassirer solves this second problem, and trace the development of the concept of *form* one of the most important concepts of Cassirer's philosophy.

<sup>&</sup>lt;sup>56</sup> Ibid. P. 28.

<sup>&</sup>lt;sup>57</sup> Bondarev D.E. German neo-Kantianism on the Essence of Modern Science and the Need to Transform its Philosophical Foundations // Bulletin of the University of Tver. 2023. № 1(63). P. 228–242. (In Russian).

<sup>&</sup>lt;sup>58</sup> Cassirer E. Cognition and Reality. The Concept of Substance and the Concept of Function. P. 348. (In Russian).

## 1.3. Philosophical Justification of Sciences of Culture. Form-concept

The tasks of the sciences of culture Cassirer defines as follows: "The sciences of culture teach us to clarify symbols in order to unravel the content which is hidden in them, and again make visible the life from which they originally arose"<sup>59</sup>. The infinite variety faced by the subject becomes finite when it takes on the *form*: "As the main feature of any human being, there is the fact that a person does not dissolve in the mass of external impressions, but tames this mass, giving it a certain *form*, ultimately coming from himself, from the thinking, feeling, wanting subject"<sup>60</sup>. The concept of *form* is one of the central in the Cassirer's theory.

In the concepts of form and reason, Cassirer sees two opposite corners, between which, starting from antiquity, the worldview of mankind moves. In the philosophy of antiquity, two opposing camps were formed: representatives of one were adherents of becoming, that is, they thought with the help of *reasons* (Heraclitus and others), representatives of the second defended the concept of immobile being, that is, they thought with the help of form (Eleates, Plato, etc.). In this matter, Cassirer considers it an important merit of Aristotle that it was he who put some symbiosis of these two methods in the center of knowledge. Aristotle agreed with Plato that the true purpose of knowledge is the knowledge of being, namely, the knowledge of form. But through the knowledge of form, we grasp only the static moment of reality. Inclusion in the epistemological act of *becoming* allows us to create a complete doctrine of reality. For such a teaching to become possible, it is necessary that form and matter, being and becoming mutually flow into each other. Thus, Cassirer believes, Aristotle created the concept of form-cause (Form-Ursache). Aristotle combines the concept of reason and the concept of form into a target principle that determines the integrity of being. Cassirer writes: "For philosophical knowledge, the principle of form and the principle of reason coincide, since both are

<sup>&</sup>lt;sup>59</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 94. (In Russian).

<sup>&</sup>lt;sup>60</sup> Cassirer E. Naturalistic and humanistic justification for cultural philosophy // Cassirer E. Favorites. An Essay on Man. M.: Gardarika, 1998. P. 169. (In Russian).

combined into the target principle. Aítía,  $\varepsilon \tilde{\delta} \delta \varsigma$ ,  $\tau \epsilon \lambda \delta \varsigma^{61}$  – only three different ways of expressing the same fundamental state of affairs"<sup>62</sup>.

Aristotle's philosophy dominated until the modern era, when the concept of reason was separated from the concept of form. In the era of modern times, a new scientific ideal of knowledge is has been put forward – mathematical natural science. Mathematics at Plato belonged to the sphere of being, and in the era of modern times (due to Galileo's ideas) mathematics goes over to the side of becoming. With the help of mathematics, it is now possible to explain the motion of the planets and their origin. The concept of form in the era of the New Age fades into the background and is completely excluded from the thinking of philosophers. Mechanical causation becomes the ideal of philosophical and scientific knowledge.

Thus, the mechanistic mindset of the world abandoned the concept of integrity, believing that it is possible to understand the movement of the whole by explaining the movement of its constituent parts. That is why in the era of the New Age, the whole began to be understood as the sum of its parts. This situation, Cassirer believes, led natural sciences to a crisis in the late 19th and early 20th centuries. This crisis could be resolved only due to a return to some of Aristotle's ideas, namely, to the idea of the independent meaning of the whole, for the knowledge of which a special act is needed that is not reduced to the knowledge of its constituent parts. Laws describing only causal ratios were not able to fill in new gaps in scientific discourse. The Aristotelian category of *integrity* thus became relevant again. For example, in physics, Faraday and Maxwell showed that a force field cannot be understood as the sum of its parts. The field is not a system of things, but a whole built of lines of force that cannot be regarded as parts of it; similarly, atoms and electrons are not its elementary parts. In biology, the doctrine of vitalism appeared, according to which in living organisms there is an intangible supernatural force that holistically determines life phenomena. Not only physics and biology turned to the category of *integrity*, but also psychology, which ceased to reduce all mental life as the

<sup>&</sup>lt;sup>61</sup> Reason, form (image or idea), purpose (Greek)

<sup>&</sup>lt;sup>62</sup> Cassirer E. Favorites. An Essay on Man. P. 97. (In Russian).

result of exposure to atomic sensations and the laws of perceptions and associations. Gestalt psychology appeared, which set the goal of understanding *the integral structure* of mental life, exploring the soul in its genesis and formation.

Thus, at the end of the 19th and beginning of the 20th centuries, the category of *integrity*, and therefore the concept of form, was restored in the sciences, but now the concept of form is considered somewhat differently. The Aristotelian concept of *cause* is excluded from the concept of form.

Cassirer argues that due to the gap between the concepts of form and reason, there was a split between the sciences of culture and the sciences of nature; in order to philosophically substantiate the sciences of culture, the concept of form should be restored in its rights: "What we strive to learn in linguistics, in art criticism and in religious studies are certain 'forms' the reasons for which cannot even be tried to reveal before their essence is understood"<sup>63</sup>. Thanks to the restoration of the concept of form at the beginning of the twentieth century, cultural sciences, following the natural sciences, reached a new level of understanding of their methodology. The concepts of form and structure, as well as causality, now appear in a new consistent symbiosis: "The recognition of the concepts of integrity and structure did not blur or eliminate the differences between the natural sciences and the sciences of culture, but removed some obstacle that had previously separated them"<sup>64</sup>. Cultural sciences cannot be studied without the factor of their formation, i.e. without using the category of causality, but it is important to note that this factor becomes only one of the ways of cognition. An analysis of their *form* is no less necessary. It is necessary not only to decompose the cultural phenomenon into a historical series of causes and consequences, according to which single phenomena influence each other, but to reveal its *integral internal meaning*. Each cultural phenomenon has its own message based on its laws and ratios. Such a double task is posed by the philosophy of culture of Ernst Cassirer: "we reach the 'theory' of culture, which, ultimately, must seek its completion in the 'Philosophy of Symbolic

<sup>&</sup>lt;sup>63</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 99. (In Russian).

<sup>&</sup>lt;sup>64</sup> Ibid. P. 105.

Forms' – even if this completion seems to us an 'infinitely distant point' to which one can only approach asymptotically"<sup>65</sup>.

Despite the fact that the concept of form made it possible to remove the barrier between the natural sciences and the sciences of culture, the sciences of culture cannot be studied without the teleological principle. The concept of *cause*, which has been excluded from science since modern times, needs to be restored, albeit in a modified form in relation to its Aristotelian meaning. According to Aristotle, the person who builds the house knows in advance what it should be. The house even before construction appears in the mind of the builder whole and complete; a house that belonged to the possible world is embodied in the real world. Thus, Aristotle explained the organic formation of all things in nature through an ontological transition from possibility to reality. Wherever one can trace the ratio of the whole (the idea of the house before construction) and its parts (parts of an already built house), one should assume expedient activity.

In this regard, the analysis of the form, structure and causality of the cultural phenomenon should be supplemented with an analysis of *action* (Akt-Analyze), which would determine the mental subjective processes underlying certain cultural forms: "We study the peculiar kind of 'symbolic consciousness' that manifests itself in the use of human language, and we ask about the type and direction of expression, sensation, fantasy and belief on which art, myth and religion are based"<sup>66</sup>.

Cassirer makes the caveat that when studying cultural sciences, one cannot confuse the notion of causality with that of form. Cassirer is sure that each concept has its own role: where the concept of causality ends, answering the question "why?". It includes the concept of form, answering the question "how?" and "what?": "The concept of form and the concept of cause are separated from each other in order to reunite and complement one and the other even stronger and inseparable. The union between both can bear fruit for empirical research only when each of them retains its own place and its independence"<sup>67</sup>.

<sup>&</sup>lt;sup>65</sup> Ibid. P. 106-107.

<sup>&</sup>lt;sup>66</sup> Ibid. P. 107.

<sup>67</sup> Ibid. P. 110.

The concept of form is, strictly speaking, neither nomothetic nor ideographic (in terms of representatives of the Freiburg school of neo-Kantianism Windelband and G. Rickert). Such an understanding of the method and tasks of the sciences of culture can be traced in the example of linguistics, as it was theoretically built by the German philologist V. Humboldt, who believed that, first of all, it is necessary to identify and explore the *worldview* inherent in language. It is necessary to reveal its uniqueness and uniqueness, and at the same time it is necessary to find the organizing *law*: "In the spiritual, as in the physical event, we meet, after all, with certain constant factors, with the main forces that constantly act in the same way"<sup>68</sup>.

How are concepts formed in the sciences of culture? To form a concept in the natural sciences, the mind needs to stop the "Heraclite's river of formation" to interrupt the flow of perception and create an image or representation. On the contrary, in order to form a concept in the sciences of culture, it is necessary to take perception in its procedural form as an ongoing process: "Language and science are a reduction of reality; art is an intensification of it. Language and science depend on the same abstraction process; art can be imagined as a continuous process of concretization"<sup>69</sup>. The concepts of cultural sciences combine three aspects: physical, historical and mental. For example, any object of culture is embodied in some physical and material substrate (physical aspect). The object belongs to a certain era and has a specific age (historical aspect). However, the most important factor is subjective – what feelings and emotions the author of the object of culture puts in when creating it (mental aspect). In the sciences of culture, concepts are brought under common signs differently from what happens in the natural sciences. Generalization of concepts in the science of culture occurs by identifying the principles of general activity and the general cause of the subjects.

The structure of perception according to Cassirer is bidirectional<sup>70</sup>: on the one hand, the world is perceived as the "world of things" on the other hand, as the "world of

<sup>68</sup> Ibid. P. 86.

<sup>&</sup>lt;sup>69</sup> Cassirer E. Favorites. An Essay on Man. P. 609. (In Russian).

<sup>&</sup>lt;sup>70</sup> Next, we are going to analyze in detail the structure of bidirectional perception in the context of the connection between myth and language. See section 2.3.

personalities". The direction from subject to object defines the world as the "world of things". This forms the constancy of properties and laws that construct the physical worldview. But the objective world of scientific knowledge does not have a "soul". It follows the path of eradicating everything personal and emotional from the view of the subject. The world of culture, on the contrary, is an "intersubjective world", in which subjects unite in a common cause and common activity: "The immutability that is required here (in the world of culture – D.B.) is the immutability of not properties or laws, but values"<sup>71</sup>. For this reason, it is necessary in the cognitive act and in the formation of concepts to consider the second direction of perception, which goes from object to subject. This perception allows us to endow objects with a special emotional meaning, i.e. endow elements of reality with soul and perceive the world as a "world of personalities".

A similar problem of the philosophical justification of the sciences of culture was solved by the neo-Kantians of the Freiburg school of Windelband and G. Rickert, introducing *historical* sciences as opposed to natural ones. Cassirer critically accepted this idea, he believes that by and large, it is impossible to reduce cultural concepts to either the method of natural sciences or the method of historical sciences: "Contrasting the 'general concepts' of 'natural sciences' with the 'individual concepts' of historical sciences was obviously an unsatisfactory solution of the problem, since such a division cuts the living fabric of the concept. Each concept, in accordance with its logical function, is a 'unity of the plural' a connection between the individual and the universal"<sup>72</sup>. Cultural sciences aim to know the structure of all possible cultural forms and find common ground in a unique and singular phenomenon. We can say that Cassirer offers some synthesis of nomothetic and ideographic methods: "We will understand a certain science in its logical structure only when we find out how private absorption by the general is carried out in it (the science of culture – *D.B.*). <...> [in the cultural sciences] *the quotient is ordered in some way by the general, but does not obey it*"<sup>73</sup>.

<sup>73</sup> Ibid. P. 69.

<sup>&</sup>lt;sup>71</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 74. (In Russian).

<sup>&</sup>lt;sup>72</sup> Ibid. P. 69.

#### **1.4. Plato's Influence. Category of Ratio**

The development of Cassirer's philosophy was influenced by many philosophers of various schools. K.A. Svasyan in his book which was about Cassirer's theory gave the most detailed analysis of the influence of philosophers of various movements. Here is a diagram from this analysis<sup>74</sup> (Figure 1):

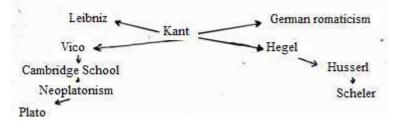


Figure 1. Philosophers and philosophical movements that influenced Cassirer

In the study, we identified the following philosophers who most influenced (after Kant) Cassirer's philosophy: Plato, Goethe, Hegel, Cohen and Husserl. Let us outline in what aspects these philosophers influenced the development of Cassirer's philosophy.

In antiquity, two philosophical traditions were laid: the logic of identity and the logic of the process. The logic of the process considered the world in motion, in its incessant qualitative change and formation. The logic of identity claims that being is one and indivisible, resting, having neither beginning nor end. The logic of the process was expressed by the teachings of Heraclitus, in which "everything flows" and the logic of identity was represented by the Elean school. The thought of the representative of the Elean school of Parmenides, who proclaimed the identity of being and thinking, is widely known. According to Parmenides, being exists but non-being does not exist. Since being is identical to itself, it means that it cannot move (otherwise it would not be identical to itself at different points in time) and disintegrate into multiplicities, which is why being is one and homogeneous. Zeno, also a member of the Elean school, noted that the principle of the identity of thinking and being leads to the fact that thinking is not able to

<sup>&</sup>lt;sup>74</sup> Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. P. 29. (In Russian).

understand formation. It follows that sensory cognition, which is "fluid" and moving, is contradictory and inert. Therefore, the truth must be comprehended not by feeling, but by reason. Like Zeno, Plato understood that sensual knowledge, which is in motion and changes in time, cannot claim true knowledge. Therefore, sensual knowledge is only an "opinion" ( $\delta\delta\xi\alpha$ ). But Plato was not a monist like Parmenides and overcame a similar logic of identity.

Plato has unity and many oppose each other. In the dialogue "Parmenides" Plato develops the dialectical principle of thinking, according to which the content of a concept cannot be determined in isolation from the content of other concepts. Plato thus highlights the category of *ratio (difference)*. Cassirer writes about Plato: "The kingdom of thought, the kingdom of truth, is not exhausted for him (for Plato – D.B.) by a single, not subject to change belief, but is constituted in many beliefs, each of which is and means something different; however, they are all closely related to each other, condition and substantiate each other"<sup>75</sup>.

Cassirer believes that the exclusion of the dialectical principle from thinking inevitably leads to the elimination of the logical category of *ratio*, and therefore inevitably leads to monism and the logic of identity. The task of dialectics is not only to define the concept of things, but also to identify the difference between them: "Before us here is really the fundamental problem of 'synthetic judgment' which always wants to be a unity of different,  $\sigma \nu \mu \pi \lambda \alpha \kappa \eta$  and  $\delta \iota \alpha i \rho \epsilon \sigma \iota$ , connection and separation without both acts hindering or contradicting each other"<sup>76</sup>.

Plato's philosophy influenced Cassirer in the aspect that the category of *difference* for the central work of the Cassirer's "Philosophy of Symbolic Forms" becomes central. This category is embodied in Cassirer in the concept of transcendental *function* – the principle that constitutes the world.

 <sup>&</sup>lt;sup>75</sup> Cassirer E. On the question of the logic of the symbolic concept // Cassirer E. Favorites: Individual and Space. M.; St. Petersburg: University Book, 2000. P. 416. (In Russian).
 <sup>76</sup> Ibid. P. 427.

### 1.5. Goethe's Influence. Synthesis of Natural and Art Forms

Goethe's work significantly influenced Cassirer's philosophy. It is known that before apprenticeship with Hermann Cohen in Marburg, Cassirer studied German literature and art, and it was Goethe's work that determined the development of his views. A detailed study of Goethe's influence on Cassirer's philosophy is set out in the works of A. A. Kravchenko<sup>77</sup> and S.A. Shilova<sup>78</sup>.

Goethe distinguished three types of phenomena: empirical phenomena, scientific and pure phenomena. The empirical phenomenon is the result of a simple observation of nature. Contemplation of such a phenomenon is available to any person. A scientific phenomenon, which is the result of determining the general signs of a phenomenon in various conditions, is available to a research scientist by experimental analysis and subsequent processing of the results. However, the true task of the scientist, according to Goethe, is to search for the original source, a pure phenomenon or "primordial phenomenon". A pure phenomenon is the result of a special vision, involving the liberation from all empirical realities of consciousness and the results of experiments, which makes it possible to detect something which is hidden and missing. Goethe considered such a primordial phenomenon in physics as electromagnetic interaction, and in optics is the opposite of light and darkness. "Primordial phenomenon" should not be considered an abstract and ideal principle (Grundsatz), but a basic phenomenon (Grunderscheinung). "Primordial phenomenon" is an archetype and primary structure, the basis of everything diverse. On the one hand, it is clean from empirical manifestations, contains nothing but its essence, but on the other hand, it is capable of being present in the material world. In his article "Experiment as a mediator between object and subject"<sup>79</sup> (1792) Goethe characterizes "primordial phenomenon" as "a formula that expresses a myriad of single numerical examples"<sup>80</sup>. According to Goethe, it is the philosopher, not the scientist, who should deal with the "primordial phenomenon": "Let the scientist leave

- <sup>79</sup> Goethe I.V. Experiment as mediator between object and subject // Goethe I.V. The Doctrine of Color. Theory of Knowledge. M.: Book house "LIBRO-COM", 2012. P. 102-110. (In Russian).
- 80 Ibid. P. 109

<sup>&</sup>lt;sup>77</sup> Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge. P. 108–134. (In Russian).

<sup>&</sup>lt;sup>78</sup> Shilova S. A. The Problem of Language in the Symbolic Idealism of E. Cassirer. P. 40–55. (In Russian).

the primary phenomena in their eternal peace and splendor, let the philosopher capture them in his field; he will find then that not in isolated cases, <...> but in the main and primary phenomena he was given decent material for further development and development"<sup>81</sup>.

Cassirer was convinced that there was no barrier between the natural sciences and the humanities. In the first volume of the "Philosophy of Symbolic Forms", he wrote that the work that is in front of the reader's eyes is a continuation of the research begun in his book "Cognition and Reality". In it, the author carefully investigated the process of formation of concepts in the natural sciences and came to the conclusion that the formation of concepts is based on a *function* that sets the law of ratio between consecutive values of a variable: "each function is some general law covering itself, due to the consecutive values that a variable can take, all individual cases to which it applies"<sup>82</sup>. In the "Philosophy of Symbolic Forms", Cassirer transfers the concept of function to the whole variety of culture: myth, language, religion and art. It is safe to say that such a conviction about the connection between the natural and human sciences in Cassirer is inspired by the work of Goethe, who compared the "art form" (Kunstgestalt) and the "form of nature" (Naturform).

Goethe believed that the laws of nature have a similarity with the laws of art, and there is a deep connection between nature and poetry. The creation of nature and the work of the artist are carried out according to the same laws. A.A. Kravchenko writes<sup>83</sup>, that in Cassirer's early work "Liberty and a Form"<sup>84</sup> in a chapter which was about Goethe, the ideas of the unity of natural science and humanitarian knowledge are clearly traced. Also, the wife of the philosopher Tony Cassirer mentions Goethe's strong influence on the formation of Cassirer's philosophy in his autobiographical book "My Life with Ernst Cassirer"<sup>85</sup>.

<sup>&</sup>lt;sup>81</sup> Goethe I.V. Aphorisms // Goethe I.V. Experiment as mediator between object and subject // Goethe I.V. The Doctrine of Color. Theory of Knowledge. P. 171. (In Russian).

<sup>&</sup>lt;sup>82</sup> Cassirer E. Cognition and Reality. The Concept of Substance and the Concept of Function. P. 29. (In Russian).

<sup>&</sup>lt;sup>83</sup> Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge. P. 131. (In Russian).

<sup>&</sup>lt;sup>84</sup> Cassirer E. Freiheit und Form. Studien zur deutschen Geistesgeschichte. Berlin: Bruno Cassirer, 1918. 574 s.

<sup>&</sup>lt;sup>85</sup> Cassirer T. Mein Leben mit Ernst Cassirer. Hildesheim: Gerstenberg Verlag, 1981. 362 s.

It is likely that the concept of *the series* of Cassirer borrowed in Goethe from his "Metamorphosis of Plants". According to A.A. Kravchenko, Goethe, before proceeding with the classification of plants, clearly hesitated before choosing a scientific principle. Goethe chooses between the "concept of genus" and the "concept of series" and eventually chooses the latter. Cassirer himself describes it this way: "Both Goethe's morphological study and each truly historical study should not be lost only in a single one, but strive for 'significant' points of what is happening, in which, as in tricks, *series* are connected (author's italics – *D.B.*). In them, for historical comprehension and understanding, stages far apart in time are connected. When certain moments are isolated from a uniform flow of time, correlated with each other and tied in a series, this will clarify the origin and purpose of what is happening, its 'from' and 'to'. Therefore, the historical concept is characterized by the fact that here one action creates a thousand connections: and what we call the specific historical 'meaning' of phenomena, their historical meaning, is constituted not so much in contemplation of the single, but in consideration of these connections"<sup>86</sup>.

In Cassirer, in the ratio of sensually contemplated phenomena, a *function* connecting them is found. And the law of series formation itself is universal and whole, which, like a blossoming flower bud, unfolds (ableiten) the variety of sensually is given according to a certain law. During his studies in morphology of plants, Goethe undertakes a search for the "preplant" ("primordial phenomenon" of a plant), which strikingly converges with the general approach of the Cassirer. Cassirer *seeks to explore the spirit in its conception*, which is why the German philosopher begins his research with an analysis of the mythological worldview and structures of the language of an archaic person. Cassirer sets a goal to trace the entire process of language development, starting from the mimic stage (as he later calls the initial stage of development of the Cassirer language in the first volume of the "Philosophy of Symbolic Forms"<sup>87</sup>), from the stage of first exclamations of archaic person. It is important that Goethe's "primordial

<sup>&</sup>lt;sup>86</sup> Cassirer E. Language and myth. To the problem of naming gods // Cassirer E. Favorites: Individual and Space. P. 345. (In Russian).

<sup>&</sup>lt;sup>87</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. 272 p. (In Russian).

phenomenon" can literally be "seen" and "heard" with the help of the senses in a single private phenomenon, which strikingly accurately repeats the mythological principle described by Cassirer in the second volume "Myth"<sup>88</sup>, "part is the whole": "Goethe is distinguished by the fact that he does not lay out the whole world into its elements, but wants to see in it a formed whole, a complex of pure *images* (Gestalten). But this 'thinking in images' obeys the fundamental principle that finds its expression in the idea of metamorphosis. Here we are not at all talking about rising from a separate image to a 'universal' one by comparing it with others and combining them under the generic concepts of species and classes, but about the fact that the relationship is generally presented here as the relationship of formation. Truly one is only what comes from the general forming principle and can be thought of as born of it"<sup>89</sup>.

In the work "Freedom and a Form"<sup>90</sup> Cassirer emphasizes that Goethe's primary sense and form are initially fused together. The feeling initially manifests itself in a form whose origin should be sought not in the outside world, but in the inside: "Fantasy (Goethe's – D.B.) here is not at all an intermediary through which the feeling passes, but it is the element itself in which it initially lives and acts. By virtue of this fusion of 'sensation' and 'contemplation' this continuous connectedness of 'subjective' and 'objective' the feeling embraces the integrity of the phenomena of life and is able to develop them purely from itself"<sup>91</sup>. Such a synthesis of feeling and form in Cassirer is language. The shape of a language is its structure, the feeling is its sonic emotional content. Cassirer compares Goethe's "primordial phenomenon" with language: "The function of language as well as art, religion, etc., both before and now lies in the 'primordial phenomenon' in the Goethean meaning of the word. It 'appears and exists' and nothing else can be explained in it"<sup>92</sup>.

<sup>&</sup>lt;sup>88</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. M.; St. Petersburg: University Book, 2002. 280 p. (In Russian).

<sup>&</sup>lt;sup>89</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 298. (In Russian).

<sup>&</sup>lt;sup>90</sup> Cassirer E. Freiheit und Form. Studien zur deutschen Geistesgeschichte. 574 s.

<sup>&</sup>lt;sup>91</sup> Cit.: Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge. P. 291. (In Russian).

<sup>&</sup>lt;sup>92</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 108. (In Russian).

Goethe's concept of "primordial phenomenon" becomes the first member of the formative series in Cassirer's philosophy. Such a "primordial phenomenon" in Cassirer is the initial expressive act of consciousness, in which the sensual and the ideal are inextricably linked. "Primordial phenomenon" in Cassirer's philosophy is the primordial impulse produced by consciousness, according to which a language begins to develop, which is like a blossoming flower, each stage of development of which is a whole and complete form. Cassirer himself describes Goethe's philosophy: "Goethe insists all the time on complete concreteness, on the complete certainty of contemplation of nature, in which each special as such should be known and seen in the clear contours of his single image; but no less confidently he claims that the special is always subordinate to the general and that only thanks to him it is constituted and becomes clear in its peculiarity"<sup>93</sup>.

#### 1.6. Hegel's Influence. Unfolding the Spirit in Time

Many researchers (A.V. Weinmeister <sup>94</sup>, M.E. Soboleva <sup>95</sup>, D.F. Veren <sup>96</sup>, S. Hamburg <sup>97</sup> and others) agree with the point of view that Hegel significantly influenced him. In the scientific community, there is an opinion proving that Hegel had a greater influence on the Cassirer than Kant. D. F. Veren in the article "Kant, Hegel and Cassirer. The origin of the philosophy of symbolic forms" believes that the third volume of the "Philosophy of Symbolic Forms" most accurately correlates with Hegel's "Phenomenology of the Spirit". In the preface to the third volume of the "Philosophy of Symbolic Forms", Cassirer writes: "When I speak of the "phenomenology of knowledge" I do not join the modern use of the word "phenomenology" but return to its original meaning, as it was established and systematically substantiated by Hegel"<sup>98</sup>. Hegel

<sup>&</sup>lt;sup>93</sup> Cassirer E. Language and myth. To the problem of naming gods // Cassirer E. Favorites: Individual and Space. P. 344. (In Russian).

 <sup>&</sup>lt;sup>94</sup> Weinmeister A.V. Symbolic Interpretation of Culture in the Concept of E. Cassirer and A.F. Losev. P. 105. (In Russian).
 <sup>95</sup> Soboleva M.E. Philosophy of Symbolic Forms E. Cassirer and the Formation of non-Classical Philosophy. P. 14. (In

Russian). % Voran D.F. Kant, Hagala

<sup>&</sup>lt;sup>96</sup> Veren D.F. Kant, Hegel and Cassirer. Origin of the Philosophy of Symbolic Forms // Cassirer E. Kant's Life and Teachings. P. 405–421 (In Russian).

<sup>&</sup>lt;sup>97</sup> Hamburg C.H. Symbol and Reality: Studies in the Philosophy of Ernst Cassirer. P. 95.

<sup>&</sup>lt;sup>98</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. M.; St. Petersburg: University Book, 2002. P. 8. (In Russian).

influenced Cassirer in two aspects. First, in that it is necessary to derive particular forms of manifestation of the spirit from its integrity as a specific "whole"<sup>99</sup>, Cassirer writes on this case: "For Hegel, phenomenology was a fundamental prerequisite for philosophical knowledge, since he set before the latter a requirement: to cover the totality of spiritual forms, where this totality itself was comprehended only in the transition from one form to another. Truth is "the whole" but this whole is not given to us immediately, but must gradually unfold in the movement of thought itself and according to its own rhythm"<sup>100</sup>. Secondly, it is necessary to consider the spirit in evolutionary temporal unity, that is, without separation from the beginning and middle, to perceive the beginning, middle and end "as integrated moments of a single and integral movement"<sup>101</sup>.

Cassirer emphasizes that his intellectual path differs from Hegel's: "In this *fundamental principle*, the 'Philosophy of Symbolic Forms' coincides with the Hegelian approach; but both in justification and in carrying it out, it must go in other ways"<sup>102</sup>. Cassirer correlates the plan of the third volume of the 'Philosophy of Symbolic Forms' (Phenomenology of Knowledge) with Hegel's Phenomenology of the Spirit: "Philosophy of symbolic forms seeks to be not a metaphysics of knowledge, but a phenomenology of knowledge. The word 'cognition' is taken in the broadest sense. It means not only the act of scientific comprehension and theoretical explanation, but each spiritual activity through which we build the 'world' in its characteristic formation, in its orderliness and 'there-being''<sup>103</sup>.

From his youth, Hegel believed that there was nothing singular in isolation from the whole. The unit is unreal, only the integer can be real. But Hegel understood the whole not as the "fixed ball" of Parmenides (monism) and Spinoza's substance, but as a whole that, like an organism, unfolds and develops in time, following its ultimate goal. Cognition moves through a triadic dialectical movement through various phases of spirit

<sup>&</sup>lt;sup>99</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 20. (In Russian).

<sup>&</sup>lt;sup>100</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 8. (In Russian).

<sup>&</sup>lt;sup>101</sup> Ibid. P. 8.

<sup>&</sup>lt;sup>102</sup> Ibid. P. 8.

<sup>&</sup>lt;sup>103</sup> Cassirer E. On the question of the logic of the symbolic concept // Cassirer E. Favorites: Individual and Space. P. 419. (In Russian).

development. Cognition begins with feelings, then the spirit is separated from them through reflection, then a self-aware reflective mind appears.

Hegel's most important property of the Absolute is creative activity. Hegel's development of concepts goes from abstract to concrete, that is, from more general and poorer (according to Hegel's theory) to more concrete and richer. The enrichment of the object occurs due not to one-sided, but multilateral (sometimes even contradictory) consideration. According to Hegel, it is impossible to express a single true judgment about a part, if its place as a whole is not determined. And a statement about the whole will determine the place and ratio of the parts.

Cassirer's method is in many ways similar to Hegelian. There are no isolated singular phenomena in Cassirer's theory. Any unity is comprehended through its semantic connection with a whole symbolic form. According to Cassirer, it is impossible to say anything about a single and isolated from a whole thing. Any single phenomenon in Cassirer is, firstly, is a phenomenon of consciousness, and secondly, it is a unit of a semantic whole.

Just like Hegel's concept of Cassirer, the spirit goes through several stages of development. Cassirer considers three stages of spirit development: the expression stage, the presentation stage, and the designation stage. At the first stage, the subject is inextricably merged with the object, the sensual and the ideal are in unity, at the second stage the image is separated from the object and the world of representations-images appears, and at the third stage the clarity of the images disappears, the ideal images are "folded" into pure signs. The three stages of spirit development in Cassirer coincide with the three phases in Hegel, who considered the phases of consciousness, self-awareness and spirit, but did not coincide in content. The first stage of Cassirer and the first stage of Hegel are similar in the sense that the spirit does not yet distinguish itself from the object, but in Cassirer 's presentation stage corresponds more to Hegel's first and second phases: consciousness and self-awareness. Cassirer at the last stage of development (the designation stage) forms the maximum "distance" between the object and the subject. The subject is separated from sensual reality, and cognition moves only in the iconic area.

In Hegel, the spirit in its finale reconnects with the object. It is also necessary to point out that Cassirer describes the spirit in terms of the natural sciences (the concept of mathematical function and series), and Hegel considers the spirit in terms of natural, social and intellectual forms.

In comparison with Hegel's system, Cassirer's theory is dialectical. The concept of a symbol (the unity of the sensual and the ideal) has a dual dialectical nature, Cassirer writes: "the deeper our reflections penetrate the foundations of cultural consciousness, the brighter its dialectical structure is revealed"<sup>104</sup>. Symbolic forms, "growing" one from the other are in dialectical connection to each other. Such opposition is shown by religion to myth and science to religion.

How is Hegel's system fundamentally different from Cassirer's? D. F. Veren identifies three points in which the system of Hegel and Cassirer fundamentally diverge: "Cassirer's phenomenology differs from Hegel's phenomenology in three respects: 1) in its concept of the fundamental stage of consciousness and subsequent separation from the following stages; 2) according to the method of describing each stage; and 3) by the absence of the final stage of philosophical knowledge"<sup>105</sup>. In Cassirer's theory, in contrast to Hegel, the path of knowledge goes in the opposite direction: from concrete to universal. Also, Cassirer does not have the final stage of philosophical knowledge like Hegel. Cassirer, the stages of development through which the spirit passes, does not correspond to the phases in Hegel's concept. In Hegel, the spirit unfolding in time has only one logical form – dialectical. Cassirer is different: at each stage of development, the logical form differs from the forms of other stages. For example, the logical form of myth is completely different compared to the logical form of scientific knowledge.

Table 1 shows the main differences between the Hegel and Cassirer theories.

<sup>&</sup>lt;sup>104</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 114. (In Russian).

<sup>&</sup>lt;sup>105</sup> Veren D.F. Kant, Hegel and Cassirer. Origin of the Philosophy of Symbolic Forms // Cassirer E. Kant's Life and Teachings. P. 410. (In Russian).

Comparison criterion	Hegel	Cassirer
The direction of cognition	Cognition goes from abstract to	Cognition goes from concrete
	specific	to abstract
Type of theory	Objective idealism	Transcendental idealism
Relation to truth	There is one absolute truth	Truth depends on the modality
		(semantic connection) of the
		symbolic form
Relation to dialectics	Absolute is dialectical	Dialectical nature of perception
Relation to logic	Critic of formal logic.	The type of logic depends on
	Dialectical logic	the symbolic form

Table 1. Comparison of the philosophical systems of Hegel and Cassirer

## 1.7. Hermann Cohen's Influence. Marburg Period of Cassirer's work

Cassirer's career as a neo-Kantian began with the acquaintance and apprenticeship of Hermann Cohen, the founder of the Marburg school of neo-Kantianism. Hermann Cohen had a significant influence on the Cassirer's philosophical views.

The central position of Kant's work is the concept of "things-in-itself" which is the foundation of his philosophical system. It is hidden from our consciousness and unknowable "thing-in-itself" is the source of sense data of consciousness. The paradox formulated by F. G. Jacobi is widely known, saying that "without a 'thing-in-itself' we cannot enter into Kant's philosophy, but with a 'thing-in-itself' we cannot remain there". What is the essence of this paradox? If we mentally remove the "thing-in-itselves thing-in-itself" then the whole building of Kant's philosophy will collapse: the "thing-in-itself" we cannot enter into Kant's philosophy. On the other hand, Kant argues that the "thing-in-itself" exists and is the reason for the appearance of "things-for-us" – phenomena. It turns out that Kant uses the categories of causality and existence to an unknowable "thing-to-itself". This kind of paradox required resolution, and many philosophers (Fichte, Schopenhauer, Hartmann, Cohen, Natorp, Cassirer, Heidegger, etc.) made attempts to resolve this paradox or give it their own consistent interpretation.

Hermann Cohen takes a step towards resolving this paradox and eliminates the "thing-in-itself" and the associated difference between sensuality and reason. Cohen's sensuality does not need a source in the form of a "thing-in-itself" it is a product of the *logical act of thinking*. The process of thinking itself is isolated and closed to itself, independently reproducing objects. Space and time in Cohen's system is the essence of a category, a concept. According to Cohen, thinking is at the heart of being. But what is the basis of thinking? The basis of thinking is, according to Cohen, an infinitesimal value. Cohen's "thing-in-itself" as a source of being, interprets through an elementary and infinitesimal quantity. In other words, the basis of thinking is rooted in a special kind of origin and universal origin (Cohen uses the German term – Ursprung). Ursprung is an elementary mental act, a logical unit of thinking that constructs the object of knowledge according to the rules of mathematical natural science.

K.A. Svasyan explains Cohen's philosophical understanding of the differential: "The differential, according to Leibniz, is something preceding every quantity and extension, therefore, something non-quantitative and non-stretched and at the same time, embodying the principle, the *hypotension* of every quantity and extension. The differential in this sense is no longer perfect and not yet real, but, being a movement, it is a movement from the original (nothing, Plato's *meon*) to reality (something). The logic of the original is exactly what Cohen thinks in the 'judgment of origin' <...> The transition from thinking to being, from ideal to real, is not abrupt, but continuous. The rationale for this lies in the infinitesimal nature of thinking itself. Ursprung thought is an infinitesimal quantity, the 'prehistory' of thinking, but at the same time the process of transition, and in this very process the 'prehistory' turns out to be already 'history' the initial becomes reality"<sup>106</sup>.

When Cassirer's first large-scale work "Cognition and Reality" saw the light, G. Cohen took it negatively. Cassirer's creative researcher Gavronsky describes this reaction as follows, referring to a key chapter in Cassirer's book: "already when reading the proofs, Cohen got the impression as he later said in a letter to Cassirer that 'our

<sup>&</sup>lt;sup>106</sup> Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. P. 52. (In Russian).

coincidence in views is under threat'. This chapter in Cassirer's work seemed to Cohen incompatible with the teachings of the Marburg School; <...> Cohen was convinced of the fallacy of the teachings of the closest student"<sup>107</sup>.

It is undoubted that Hermann Cohen largely determined Cassirer's philosophy. The main difference between the concepts of the two philosophers is that in Cassirer the central basis of philosophy is not a Cogen infinitesimal value, but a mathematical series. The series in Cassirer's concept should be understood as a law that defines the relationship between parts of some integrity. Thus, the fundamental difference between Cohen and Cassirer is that consciousness constructs reality based not on a *single* infinitesimal ratio (differential), but on the basis of a *whole*, series, structuring sense data according to a strict law<sup>108</sup>.

### **1.8. Edmund Gusserl's Influence. Formation of Unity from Plurality**

Many researchers of the philosophy of E. Cassirer note the great influence of Edmund Husserl on the "Philosophy of Symbolic Forms". Cassirer was well acquainted with the works of E. Husserl, which is confirmed by the following quote from the second volume of the "Philosophy of Symbolic Forms": "One of the fundamental merits of Husserl's *phenomenology* is that it returned visual acuity to the perception of a variety of spiritual 'structural forms' and indicated a new path for their analysis, different in question and methodology from psychological. Especially decisive is the clear separation of mental 'acts' and 'subjects' to which their intention is directed. In the path that Husserl himself traveled from 'Logical Studies' to 'Ideas of Pure Phenomenology' the fact is increasingly clear that the task of phenomenology, as he understands it, is not limited to the analysis of cognition, but should include the study of the structures of completely different subject areas in strict accordance with what they 'mean' and without considering the 'reality' of their subject. Such a study should include the mythological 'World' in its

<sup>&</sup>lt;sup>107</sup> Demidova M.V. Man as an "Animal Symbolicum" in the Philosophy of Culture of E. Cassirer: Historical and Philosophical Analysis. P. 53. (In Russian).

<sup>&</sup>lt;sup>108</sup> Evlampiev I.I. The Formation of European Non-Classical Philosophy in the Second Half of the XIX – Early XX Centuries: a Textbook. P. 123. (In Russian).

circle, so as not to derive its peculiar 'content' by induction, generalization of the diversity of ethnological and ethnopsychological experience, but to comprehend it in the course of a pure analysis of 'ideas'. However, attempts of this kind, as far as I know, have not yet been made either by phenomenology itself or by a specific study of mythology, in which the genetic and psychological formulation of the question still reigns almost completely"<sup>109</sup>.

Cassirer and Husserl were personally acquainted, three letters have survived to this day: Husserl-Cassirer (3.04.1925)<sup>110</sup>, Cassirer-Husserl (10.04.1925)<sup>111</sup>, Husserl-Cassierer (11.3.1937)<sup>112</sup>. In a letter dated 3.04.1925, Husserl praises the second volume of the "Myth" of Cassirer's "Philosophy of Symbolic Forms" and notes that he is very pleased with the fact that Cassirer enriched Marburg neo-Kantianism with phenomenological motives. Husserl expressed particular appreciation for the fact that Cassirer in the "Myth" referred to him and, judging by his answer, Cassirer is one of the few who correctly understood the essence of the phenomenological method. But Husserl also noted the weaknesses of his work, he wrote: "Your book (the second volume of "Myth" - D.B.) leaves gigantic problems unresolved. First of all: the idea and form of a mythical worldview (as well as any other universal intentionality that is woven into the unity of some holistic worldview and is unaccountably shared by the human community living in this worldview) primarily characterizes a certain actual historical education. But historical genesis is subject to essential laws. Based on the basics of transcendental structures, which include the structures of the genesis of transcendental life, it is necessary to understand the necessary stages of a specific type of development of the human community in general. We are talking about the type of development of a significant, but at the same time ambiguous worldview, as well as the type of all universal appearances and misconceptions that are found at various stages of the development of an already awakened mind"<sup>113</sup>. A week later, Cassirer's response followed 10.04.1925, where he

<sup>111</sup> Ibid. P. 149.

<sup>&</sup>lt;sup>109</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 39. (In Russian).

<sup>&</sup>lt;sup>110</sup> Husserl E. Selected Philosophical Correspondence. M.: "Phenomenology-Hermeneutics", 2004. P. 147. (In Russian).

<sup>&</sup>lt;sup>112</sup> Ibid. P. 151.

<sup>&</sup>lt;sup>113</sup> Cit.: Ibid. P. 148–149.

pointed out that he had solved the problem identified by Husserl in the article "Conceptual form in mythical thinking"<sup>114</sup>. In a third letter, dated 11.03.1937, Husserl thanks Cassirer for "new achievements in clarifying natural-scientific causality from a neo-Kantian point of view"<sup>115</sup>, expressed in "Determinism and Uncertainty in Modern Physics"<sup>116</sup>. The fact that Husserl was familiar not only with the first and second volumes, but also with the third volume of the "Philosophy of Symbolic Forms" is confirmed by notes found in the Husserl archive in Louvain on the margins of working materials<sup>117</sup>.

An analysis of the influence of E. Husserl on the work of E. Cassirer can be found in the works of Russian authors K.A. Svasyan <sup>118</sup>, A.V. Isaeva <sup>119</sup>, M.E. Soboleva <sup>120</sup>, and foreign H. Mekel <sup>121</sup>, J. M. Krois<sup>122</sup>, E. W. Orth<sup>123</sup>, E. Skidelsky<sup>124</sup>. According to K. Svasyan, Cassirer uses Hegelian phenomenology in the *dynamic* analysis of forms, in the transition of one form to another. And already in the modern Husserl sense, the German philosopher uses phenomenology to study forms in terms of their autonomous integrity and self-sufficiency. It is the combination of these principles that forms the basis of the "Philosophy of Symbolic Forms"<sup>125</sup>.

Many researchers, for example, such as A.V. Isaeva, H. Mekel and others in their works note that Cassirer highly appreciated the works of the second logical ("Logical Studies") and third transcendental ("Ideas for Pure Phenomenology") periods of Husserl's work. In our opinion, Cassirer was also influenced by the first early stage of Husserl's work, namely the work of the "Philosophy of Arithmetic" published in 1891. To

<sup>&</sup>lt;sup>114</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 272–326. (In Russian).

<sup>&</sup>lt;sup>115</sup> Cit.: Husserl E. Selected Philosophical Correspondence. P. 151.

<sup>&</sup>lt;sup>116</sup> Cassirer E. Determinismus und Indeterminismus in der modernen Physik, Historische und systematische Studien zum Kausalproblem. Göteborg: Wettergren & Kerber, 1936. 265 s.

<sup>&</sup>lt;sup>117</sup> Jamme Ch. Ueberrationalismus gegen Irrationalismus. Husserls Sicht der mythischen Lebenswelt // Jamme Ch., Pöggeler O. Phänomenologie im Widerstreit. Zum 50. Todestag Edmund Husserls. Frankfurt: Suhrkamp Verlag, 1989. S. 65-80.

<sup>&</sup>lt;sup>118</sup> Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. P. 25. (In Russian).

<sup>&</sup>lt;sup>119</sup> Isaeva A.V. Myth in the Philosophy of E. Cassirer. P. 43. (In Russian).

<sup>&</sup>lt;sup>120</sup> Soboleva M.E. Philosophy of Symbolic Forms E. Cassirer and the Formation of non-Classical Philosophy. P. 113-128. (In Russian).

 <sup>&</sup>lt;sup>121</sup> Mekel H. "Symbolic Expressiveness" - a Phenomenological Concept? On the Relation of the Philosophy of Symbolic Forms by Ernest Cassirer and the Phenomenology of Edmund Husserl // Logos. 1995. № 6. P. 127–143. (In Russian).
 <sup>122</sup> Krois J.M. Cassirer: Symbolic Forms and History. P. 24.

<sup>&</sup>lt;sup>123</sup> Orth E. W. Ernst Cassirers Philosophie der symbolischen Formen und ihre Bedeutung für unsere Gegenwart // Deutche Zeitschrift für Philosophie. S. 119–136.

<sup>&</sup>lt;sup>124</sup> Skidelsky E. Ernst Cassirer: The Last Philosopher of Culture. P. 195.

<sup>&</sup>lt;sup>125</sup> Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. P. 27. (In Russian).

demonstrate the similarity of the ideas of Husserl's early philosophy with the ideas of Cassirer, we give a brief analysis of the "Philosophy of Arithmetic"<sup>126</sup>.

Husserl in the "Philosophy of Arithmetic" sets himself the task of finding the philosophical foundations of arithmetic not from a theoretical and cognitive point of view, but from an epistemological point of view. He is inspired by the idea of understanding not "what" we learn, but "how" we learn something using arithmetic means. The phenomenologist describes the goals of his work as follows: "Perhaps my efforts will not be completely useless; perhaps I will be able, at least in some points, to pave the way for the true philosophy of calculus (Philosophie des Kalküls), this requirement, the expectation (Desiderat) of whole centuries"<sup>127</sup>.

Husserl's goal is a comprehensive and multilateral analysis of the concept of number and determining its true origin (Ursprung). He considers natural numbers not just something abstract, on the contrary, the natural series of numbers is a structure rooted in our thinking, thanks to it, consciousness is able to combine single phenomena of consciousness in aggregate and form concepts. Therefore, the founder of phenomenology sets the goal of exploring the origin of *the natural series* (numerelia cardinalis<sup>128</sup>) and revealing its relationship with cognition of consciousness.

How did philosophers of different eras determine the number? The ancient Greek mathematician Euclid in the VII book "Elements" defined a number as a set of elements, the British philosopher J. St. Mill interpreted the number as something that allows only physical objects to be described, and G. Leibniz and J. Locke as something universal that can combine objects of both physical and ideal worlds. The German logician Frege defined numbers as properties of sets in a one-to-one correspondence relation. Husserl does not agree with any of the listed definitions, since none of them describes the essence of the number. In order to answer the question "what is a number?" Husserl attempts to turn to psychology. Husserl asks the question: what in our minds is responsible for the

<sup>&</sup>lt;sup>126</sup> The analysis of the "Philosophy of Arithmetic" used the work by N.V. Motroshilova "Early Philosophy of Edmund Husserl (Halle, 1887–1901)" (M.: Progress-Tradition, 2018. 624 p. (In Russian)), where her holistic textual study was given. <sup>127</sup> Cit.: Motroshilova N.V. Early Philosophy of Edmund Husserl. P. 224. (In Russian).

<sup>&</sup>lt;sup>128</sup> In Latin, cardialis means "original" or "main"

process of *combining* (Verbindung) various objects into something *single*? How does our consciousness combine sense data and mental acts into a holistic experience? For example, how are we able, to listen to individual notes, and combine them into one melody? Husserl gives the answer: "as a result of reflection aimed at the characteristic union of contents, the concept of a continuum as a whole arises, the parts of which are united precisely by the method of continuous connection"<sup>129</sup>.

It is important to note that Husserl is not interested in abstract ideal multiplicity, but in the multiplicity of mental phenomena: "First, it should be noted that we are not aimed at *defining* the concept of multiplicity, but at *the psychological characteristic* of the phenomenon on which the abstraction of this concept is based"<sup>130</sup>. How does our consciousness unite psychological phenomena into collective associations (kollektive Verbindung)? Indeed, concepts are built on the basis of collective associations. And how does our consciousness add singular impressions to a previously created multiplicity? Multiplicity according to Husserl is the simultaneous given of any contents of consciousness. The addition of contents to the existing population occurs due to the awareness of them as for themselves noticed (als für beverkte). N. V. Motroshilova notes that such "noticing" or paying attention indicates that Husserl in his early work indicates an intentional characteristic of consciousness, the concept of which he would develop in his later works. Each thought "here and now" act of consciousness enters into any multiplicity and requires the existence of other elements of the set. For example, in order to perceive a melody, we must be given at each moment in time a whole set of notes: "the sounds of the melody must be presented at the same time. But by no means as simultaneous; on the contrary, they are to us in a known time sequence"<sup>131</sup>. We can connect contents in sets through synthesizing mental acts (zusammenfascende psychishe Akte).

How does the number relate to sense data of consciousness? Husserl is sure that the number is not something related to time, as in Kant's philosophy. The number is also not

<sup>&</sup>lt;sup>129</sup> Cit.: Motroshilova N.V. Early Philosophy of Edmund Husserl. P. 240. (In Russian).

<sup>&</sup>lt;sup>130</sup> Cit.: Ibid. P. 241.

<sup>&</sup>lt;sup>131</sup> Cit.: Ibid. P. 248.

something related to space, like the neo-Kantian F.A. Lange. Husserl admits that for archaic societies, the concept of number is associated with the sensory perception of objects in space, which does not allow for explaining the multiplicities formed in the abstract field of thinking. "There is no way to conclude that human intelligence in counting operations is necessarily limited by spatiality, if there are other explanations closer. People find in primitive cultures only reasons for calculating groups of spatial objects, and then their numerical concept can correspond to what we can now mean by the cumulative name "number (Anzahl) of spatial objects". Further developing culture adopted old words, but meanwhile their meanings on the path of metaphysical, figuratively, use went far beyond the spatial domain. Like most concepts, numerical concepts have already done their historical development"<sup>132</sup>. An important part of Edmund Husserl's reasoning is that our consciousness unites in aggregate precisely different (not identical) objects in aggregate. When we identify the difference between two objects, then we simultaneously represent the identity of each object with itself. If we have two rams in front of us, then we first note their non-identity to each other, and at the same time the identity of each ram with itself: "We, therefore, only get the general concept of multiplicity (Vielheitsbegriff) when we proceed from a specific multiplicity and when we distinguish any content from another, but at the same time completely abstract from the special properties of specifically given contents, considering each of them as something identical to oneself. In this way, the concept of multiplicity arises - to a certain extent as an empty form of distinctiveness"<sup>133</sup>. "When we carry out counting in the strict sense of the word, that is, we carry out numerical abstraction, then we bring the counted things under the concept of unity; we see them as something one (Eins). And this says only the following: we consider each thing as something identical to ourselves and different from other things"134. Thus, consciousness unites something into multiplicity through a special act of remark, attention. Unit representations are combined into multiplicity, and a given set becomes a "single representation in their totality" (Inbegriff).

<sup>&</sup>lt;sup>132</sup> Cit.: Ibid. P. 265.

<sup>&</sup>lt;sup>133</sup> Cit.: Ibid. P. 269.

<sup>&</sup>lt;sup>134</sup> Cit.: Ibid. P. 269.

It is important to note that in this case Husserl describes the formation of a generic concept, which we described in detail in the section on the early stage of Cassirer's work. That is, consciousness juxtaposes two experiences in which it highlights similarities and discards differences. But Husserl believes that such a process occurs due to the natural series of numbers inherent in our consciousness.

Husserl intends to give a more accurate description of the kind of combination of single impressions in the aggregate and to determine the relationships that develop in the mind. Husserl calls this process "collective unification" (der kollektiven Verbindung). These relations are of two kinds: 1) relations having the character of primary contents; 2) relationships that have the character of "mental" contents. Motroshilova believes that these classes differ in whether a certain kind of reflection is absent or present in them. In the first grade it is not, in the second there is. The second class is characterized by the presence of a special act establishing relations (die beziehungstiftende Akt). Motroshilova, analyzing Husserl's text, believes that under conscious reflection, which manifests itself in the second class, the philosopher means an intentional act (the name of which would be given by the German philosopher in his later works).

Let's ask the question, how do we perceive the rose as a kind of integrity? Looking at the rose, we first isolate the smell, then the color, petals, stem, etc. "Each part is isolated due to the fact that we specifically notice it (durch ein besonderes Bemerken) and firmly combine it into one whole with other parts. As the next step in the analysis, as we can see, a collection (Inbegriff) arises, and precisely as a collection of specially noticed (für sich) parts of the whole"<sup>135</sup>. An important conclusion follows: *no aggregate as a whole is immediately given to our consciousness*. The whole as a set is held by a special act of consciousness. Husserl calls it "*holding a unifying interest and with it an act of special noticing*"<sup>136</sup>. This ability of consciousness to combine single phenomena into sets is the highest activity of the spirit. Man through this act of binding in ideal aggregates is able

<sup>&</sup>lt;sup>135</sup> Cit.: Ibid. P. 294.

<sup>&</sup>lt;sup>136</sup> Cit.: Ibid. P. 297.

to create concepts in culture, religion and science. The number highlights, holds in consciousness not only sense data, but also abstract objects.

Husserl is sure that in order for a number to become abstract and ideal, consciousness needs to go a long way. This path can be traced both in the historical process, analyzing the origin of the number among the "primitive" peoples, and on the scale of the child's development. Both the first and the second need a lot of time and effort in order to "separate" the number from the sense data of consciousness and translate them into an abstract plane. Exactly the same idea will be expressed by Cassirer in the "Philosophy of Symbolic Forms", when he would analyze the formation of numbers in the language (in the first volume of Language) and in mythological consciousness (in the second volume of Myth).

The second part of the "Philosophy of Arithmetic" is devoted to the methods of sign-symbolic representation of numbers. The second volume, which was never published, was to be devoted to the same issue<sup>137</sup>. What is important for our study is how Husserl talks about number as a symbol. The founder of phenomenology divides representations into eigen and non-eigen<sup>138</sup>. A representation in the non-eigen sense of the is a symbolic representation, the content of which is given to us not directly, but indirectly through a sign. Eigen representation is the representation of a perceived object directly without a sign. If we trace the development of a person, starting from his archaic period of development, then we can notice that the "primitive" person was dominated by ideas in the eigen sense. The owner of the mythological type of consciousness was able to perceive the essence of the objects contemplated directly without any mediation. In comparison with him, a modern person, the owner of scientific consciousness, on the contrary, perceives reality indirectly through complex sign systems. Non-eigen

<sup>&</sup>lt;sup>137</sup> In the sketches for the second volume of the "Philosophy of Arithmetic", published in the 21st volume of Husserliana, Husserl writes that in the first volume he set the task of describing numerical arithmetic. In the second volume, he wants to approach the description of universal arithmetic, which must precede numerical. Husserl describes the distinction of these two arithmetic thus: "general arithmetic, the theory of the sphere of a number, which examines the regularities that matter to specifically nondeterministic, therefore arbitrarily taken (beliebige) numbers, while numeric arithmetic mediates theories that are significant to numbers of the ten-ringed form" (Cit.: Ibid. P. 402).

<sup>&</sup>lt;sup>138</sup> Husserl's teacher Franz Brentano also divided representations into eigen and non-eigen. Husserl notes that the concept of improper representations in his system is different from the Brentanian considering.

representations precede the direct contemplation of any objects that are subsequently recognized symbolically. In a modern person, one can observe how symbolic representations can even replace direct sensory representations. For example, when it is enough for a person to read about the airless space of space instead of visiting there.

Thus, in the perception of a modern person, non-eigen symbolic representations prevail. Images seen by himself occupy a small share of representations. Husserl believes that "not only accessible (direct – D.B.) contemplation, but also *abstract* and *universal* objects can be symbolized"<sup>139</sup>. For example, we can perceive red in the proper sense – to see red with our own eyes, or we can symbolically encrypt it through the number of light vibrations per second. Symbolic representations can be combined into complex sign systems, which Husserl calls *essences* or *ideals*. According to Husserl, the concept of idea that Plato introduced, in the historical retrospective of all mankind, was the emergence of a symbolic type of consciousness. The proper and improper types of representations in Husserl's "Philosophy of Arithmetic" correspond well to the stages of symbol development in Cassirer's "Philosophy of Symbolic Forms". Eigen representations correspond to the stage of expression (expressivity), non-eigen representations to the stages of representation) and designation.

It is important to emphasize in Husserl's study the reasoning behind how acts of counting objects by our consciousness occur. Why can we easily imagine three chairs and not a thousand chairs? Answering this question, Husserl refers to the research of Wilhelm Wundt, a German physiologist and doctor, according to whose teachings the human psyche is not able to hold more than twelve elements in one act of attention. In other words, there can be no more than twelve representations in the proper sense. N.V. Motroshilova believes that Husserl in this reasoning came across "a truly inexhaustible area of complex, interdisciplinary work, at that time with *the unifying role of philosophy and in alliance with mathematics* (author's italics – *D.B.*). It had, in addition to its intrascientific value, a very wide cultural-historical, vital-practical significance"<sup>140</sup>.

<sup>140</sup> Ibid. P. 374.

<sup>&</sup>lt;sup>139</sup> Cit.: Motroshilova N.V. Early Philosophy of Edmund Husserl. P. 363. (In Russian).

According to Husserl, due to the number, human consciousness was able to develop to the creation of not only large unrepresentable numbers. It was thanks to the ability of symbolic representation that a person managed to develop the ability to speak and describe unrepresentable (abstract) objects, for example, mathematical objects, gods, planets, etc.

Husserl in the "Philosophy of Arithmetic" comes to the fundamental conclusion that due to the natural series of numbers our consciousness is able to combine anything in concepts. At the end of the "Philosophy of Arithmetic", Husserl asks the question: can there be another (non-natural) mathematical series that can combine both abstract and sensual phenomena of consciousness in concepts and totality, with the help of which it is possible to describe not only mathematical sets, but, possibly, objects of culture, myth and religion? In our opinion, it is this question that Cassirer answers, making the concept of a series one of the central of his "Philosophy of Symbolic Forms". Cassirer in "Cognition and Reality" showed that the concept is formed due to the function inherent in our consciousness, which juxtaposes two sensual images, discarding differences and highlighting similarities. This generic concept is based on one of the special cases of the series - the natural series of numbers. In "Cognition and Reality", Cassirer showed that concepts in physics, mathematics, and other natural sciences are formed according to other (non-natural) series. And as we will see further, the concept of the Cassirer series is considered a constitutive prototype of the world of culture, which allows us to describe not only the scientific mindset, but also the mythological and religious types of worldviews.

Many researchers recognize the significant influence of the middle and late stages of Husserl's work on Cassirer's philosophy. We hypothesize that Cassirer was also influenced by the first early stage of Husserl's philosophy – "Philosophy of Arithmetic".

### 1.9. Purpose and Method of "Philosophy of Symbolic Forms"

Three volumes of<sup>141</sup> "Philosophy of symbolic forms" is the most significant in the work of E. Cassirer. This work was written in the period 1923–1927. In the preface to the first volume, Cassirer writes that this fundamental work is a continuation of the research that was begun in his monograph, published in 1910 under the title "Cognition and Reality".

Cassirer created the "Philosophy of Symbolic Forms" with the aim of giving a critical view of the scientific mindset, which has always claimed uniqueness and universality: "Mathematical and natural-scientific being, in its idealistic understanding and interpretation, does not exhaust all reality, since the activity of the spirit in its spontaneity is far from fully manifested in it"<sup>142</sup>. The activity of the spirit unfolds not only in creating a scientific mindset, but also in creating the world of culture, art, language, myth and religion. The concept of *function*, discovered by Cassirer in the sciences of modern times, is only a special case of the expression of a more fundamental spiritual symbolic function: " 'Philosophy of symbolic forms' re-problematizes the mindset of natural sciences, but now it goes to it in a different way and looks at it in a different perspective. Instead of considering in it actual state, she tries to catch it in the mediations necessary for her" 143. By what laws is mythological and religious consciousness organized? Finding such laws is the central vector of Cassirer's thought, he sets the task of discovering and describing the *formative* principle according to which "worlds" other than scientific are constructed: "For her question (the 'philosophy of symbolic forms' – D.B.) is not aimed at the commonality of *origin*, but at the commonality of *structure*. She is not looking for a hidden common basis of language and religion, but should ask whether

<sup>&</sup>lt;sup>141</sup> In the work of O.V. Knizhnik (Knizhnik O. V. Ernst Cassirer's Symbolic Universe. P. 16–55. (In Russian)) the results of the analysis of manuscripts and sketches by E. Cassirer devoted to the fourth Philosophy of Symbolic Forms, which was not published, are presented. In the fourth volume, unreleased during the life of the philosopher, criticism of the contemporary "philosophy of life" is presented. The fourth volume is called "Towards the metaphysics of symbolic forms" which presents a solution to the problem of the ratio of "spirit" and "life".

<sup>&</sup>lt;sup>142</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 16. (In Russian).

<sup>&</sup>lt;sup>143</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 7. (In Russian).

it is impossible to find between them, despite the fact that these are completely independent and peculiar formations, the unity of *function*<sup>"144</sup>.

At its core, Cassirer's philosophy relies entirely on Kant's transcendental method of cognition, and Cassirer's new direction of thought unfolds under the slogan: "Criticism of mind becomes <...> criticism of culture"<sup>145</sup>. Cassirer raises the question of the need to rethink and expand the field of action of the transcendental Kant method. First, unlike Kant's philosophy, "empirically, this is not so much reflected as *generated* by a certain principle. They all create their own special symbolic forms"<sup>146</sup>. Secondly, Kant believed that cognition should rely entirely on mathematical natural science, that is, any study of the subject should directly rely on mathematical laws. But according to Cassirer, "the transcendental unity of apperception is in no way limited to the logic of scientific thinking"<sup>147</sup>. Cassirer's philosophy is busy researching all possible directions of world understanding: "Each new 'symbolic form' not only the conceptual world of knowledge, but also the figurative world of art, myth or language is, in Goethe's words, 'a revelation coming from inside to outside' synthesis of the world and spirit' for the first time guaranteeing their true first union"<sup>148</sup>.

Is there a world outside this function? Cassirer gives the following answer: "What is an absolute reality outside of this set of spiritual functions, what is in this sense a 'thingin-itself' to this question the spirit no longer seeks to get an answer, gradually learning to understand it simply as an erroneous statement of the problem, the illusion of thinking"<sup>149</sup>. Not the "thing-in-itself" is the source of our consciousness. Consciousness itself, Cassirer believes, through the active activity of the spirit creates itself and cognizable objects: "And yet the thin gap that once and for all separates cognition from 'things-in-itself' is only a different expression of the fact that cognition has now found its solid basis in

<sup>149</sup> Ibid. P. 45.

<sup>&</sup>lt;sup>144</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 262. (In Russian).

<sup>&</sup>lt;sup>145</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 17. (In Russian).

<sup>&</sup>lt;sup>146</sup> Ibid. P. 15.

<sup>&</sup>lt;sup>147</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 17. (In Russian).

<sup>&</sup>lt;sup>148</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 44. (In Russian).

itself"<sup>150</sup>. Consciousness is not the product of nature's *passive* formation of us. Consciousness forms itself in an *active* way. And this is one of the main differences between the Kant's system and the Cassirer's system. Feelings do not come to a person from the outside, a person produces these feelings himself. Consciousness, reproducing the sensation, formalizes it into symbolic content: "consciousness is not limited to simply *having* sensual content, but where it *produces* it from itself. The power of this production is what formalizes the pure content of sensation and perception into symbolic content. In it, the performance has ceased to be simply perceived from the outside, but has become what is created from the inside, something in which the basic principle of free education dominates"<sup>151</sup>.

Along with the concept of *function*, an important concept in Cassirer's philosophy is the concept of a mathematical *series* – a formative principle, due to which the formation of concepts occurs. Thanks to the work of a number of a continuous and indefinite flow of sense data, special "formations" with unchanged outlines and properties are distinguished and organized the concepts of things formed by consciousness: "Any formation of concepts, in whatever field and on whatever material it takes place whether in an 'objective' experience or in a purely 'subjective' view is characterized by the fact that it contains a certain principle of joining and lining up in a series"<sup>152</sup>. How does the function differ from the series? The series is the forming core of the symbolic form, its "origin". The function is its coordinating principle and sets the ratios between the elements of the series. The elements of the series are symbols which are combinations of sensuality and meaning (meaning). A complex system of ratios of symbols forms a symbolic form system of concepts that forms a closed holistic mindset.

For the first time, Cassirer uses the term "symbolic form" in one of his early works, Einstein's Theory of Relativity: "It (philosophy - D.B.) should cover a *whole* of those symbolic forms, the application of which for us arises the concept of a divided reality by

<sup>&</sup>lt;sup>150</sup> Cassirer E. The concept of symbolic form in the structure of the sciences of spirit // Cassirer E. Favorites: Individual and Space. P. 401. (In Russian).

<sup>&</sup>lt;sup>151</sup> Ibid. P. 396.

<sup>&</sup>lt;sup>152</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 276. (In Russian).

virtue of which the subject and object are divided for us, 'I' and the world, in a certain form opposed to each other and give each individual moment of this totality a solid place"<sup>153</sup>. Thus, the diversity of culture in Cassirer is due to the variety of irreducible and self-contained symbolic forms. Cassirer gives the following definition of a symbolic form: "The 'symbolic form' should mean all the *energy* of the spirit (author's italics – *D.B.*), through which some spiritual semantic content is associated with a specific sensory sign and internally assigned to this sign"<sup>154</sup>. Cassirer in the "Philosophy of Symbolic Forms" expands the concept of function, calling it a *symbolic function*. To reveal the structure of the world of culture, it is necessary to look for a symbolic function not in the *ratio between signs* (as in the natural sciences), but *in the ratio between sensual data of consciousness, since the sensual and ideal in the world of myth, religion and art are always given to us together*: "Therefore, the 'Philosophy of Symbolic Forms' recognizes that everything, called by us in any sense 'spiritual' must also find its specific embodiment ultimately in the sensual, that it can manifest itself only in it and with it"<sup>155</sup>.

Symbolic forms have a complex internal structure, exist in isolation from each other and have two important properties: *quality* and *modality*. By *quality*, Cassirer understands this kind of connection of elements of a symbolic form with each other, which creates *series* ordered in accordance with the law inside consciousness. Series allow within forms to create a ratio that always "belong to a certain semantic *integrity*, which, in turn, has its own 'nature', a special closed law of form"<sup>156</sup>.

A second important property characterizing symbolic forms is the concept of *modality*. The connections that form the form into a single whole differ in their *modality* and "each form <...> receives a special plane within which it operates"<sup>157</sup>. Modality shows within what *semantic connection* this or that material of the form exists: "If we schematically designate various types of relations – relations of space, time, causality,

<sup>157</sup> Ibid. P. 30.

<sup>&</sup>lt;sup>153</sup> Cassirer E. Einstein's Theory of Relativity. P. 126. (In Russian).

<sup>&</sup>lt;sup>154</sup> Cassirer E. The concept of symbolic form in the structure of the sciences of spirit // Cassirer E. Favorites: Individual and Space. P. 394. (In Russian).

<sup>&</sup>lt;sup>155</sup> Cassirer E. On the question of the logic of the symbolic concept // Cassirer E. Favorites: Individual and Space. P. 418. (In Russian).

<sup>&</sup>lt;sup>156</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 31. (In Russian).

etc. as  $R_1$ ,  $R_2$ ,  $R_3$ ..., then each of them has a special 'modality index' – m1, m2, m3..., showing within which functional and semantic connection it should be considered"<sup>158</sup>. For example, the concept of time appears in the scientific mindset as an abstract quantity and an unconditional measure of all movements, and in a musical work with its rhythm and size, the same concept of time appears in a different semantic connection. Space can also be said: the isotropic space of the scientific world, usually depicted in drawings and diagrams, is not reducible to the space of a work of art, for example, icon painting, where a theocentric model of reality is depicted through inverse perspective. Cassirer writes: "a certain perception-related experience can be given a completely different meaning (author's italics -D.B.) depending on the connection into which it is introduced and on the category of forms in which it is learned"<sup>159</sup>. A person's view of the world, taking the form of mythological-religious or scientific, depends on one type or another of modality: "If we compare the empirical-scientific and mythological mindset, it will immediately become clear that their *opposite* (author's italics -D.B.) is not based on the fact that when considering and interpreting reality, they use completely different categories. Not in the properties, not in the quality of these categories in their modality, this is how myth and empirical-scientific knowledge differ"<sup>160</sup>.

According to Cassirer, the truth of a statement depends on the symbolic form: what is true in one symbolic form can be false in another. Truth is a variable that characterizes the symbolic form: "The concept of truth and reality in science is different than in religion or art this is as true as the fact that in religion and art the specific and unique connection between 'internal' and 'external' between the being of the Self and the world is not so much the result of the designation as the act of the founders"<sup>161</sup>.

What is the goal of the "Philosophy of Symbolic Forms"? In his later work, published in the USA, "An Essay on Man" Cassirer writes that philosophy and science (at the beginning of the twentieth century) are in a state of disunity. In philosophy, there

<sup>&</sup>lt;sup>158</sup> Ibid. P. 32.

<sup>&</sup>lt;sup>159</sup> Cassirer E. On the question of the logic of the symbolic concept // Cassirer E. Favorites: Individual and Space. P. 420. (In Russian).

<sup>&</sup>lt;sup>160</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 76. (In Russian).

<sup>&</sup>lt;sup>161</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 27. (In Russian).

are many different currents, each of which erects its own theoretical building by systematizing empirical facts. For example, for Marxism, the main factor in human development was economical factor, for Freudian – sexual, for Nietzsche's philosophy – the will to power, and so on. In the field of scientific knowledge, there is the same problem. Chemistry, biology, mathematics and physics have no general scientific principle and methodology. Cassirer is sure: "modern human theory has lost its ideological core, and in return we received complete anarchy of thought"<sup>162</sup>. The German philosopher considers such a fragmentation of philosophy and science to be a threat to the ethical and cultural life of modern man. Along with the fragmentation and isolation of sciences from each other, a huge amount of factual material appears in each of them. How not to get lost to a modern person in a world in which new disciplines, theories and even ideologies appear every year? How not to get lost in such a wealth of human culture? Cassirer believes that without finding the right intellectual path "we will not be able to understand the common features of human culture, we will be lost in the mass of incoherent and fragmented data, devoid of conceptual unity"<sup>163</sup>.

Cassirer is sure that a person needs to be known not in a narrowly individual sense, but as part of the whole, as a unit inscribed in the wide and multifaceted cultural life of society. Thus, language, myth, religion, art and science are the essence of the field of human activity, the structure of each of which the "Philosophy of Symbolic Forms" should clarify: "The same applies to each symbolic form, to language, art or myth, for each of them has a certain type of vision and conceals a special, only it is an inherent source of light. The function of seeing, the very spiritual formation of light, can never be realistically understood from things or from what is happening. For the whole point here is not what is seen in it, but in the primordial orientation of the gaze"<sup>164</sup>.

The material for the "Philosophy of Symbolic Forms" can be facts from such sciences as biology, ethnography, sociology, linguistics, history, logic, aesthetics,

<sup>&</sup>lt;sup>162</sup> Cassirer E. Favorites. An Essay on Man. P. 466. (In Russian).

<sup>&</sup>lt;sup>163</sup> Ibid. P. 467.

<sup>&</sup>lt;sup>164</sup> Cassirer E. Language and myth. To the problem of naming gods // Cassirer E. Favorites: Individual and Space. P. 333. (In Russian).

psychology, natural sciences, etc. Biology is necessary to point out the fundamental difference between man and animal, ethnography and sociology are necessary to trace the genesis of language and myth, starting with primitive tribes, psychology (especially children's) is the necessary material for analyzing the formation of speech, history serves to build a common timeline for the development of mankind. Cassirer warns that the "Philosophy of Symbolic Forms" will inevitably face a confrontation between cultural forms: religion opposes myth, science opposes religion. What is the common denominator for all kinds of cultural forms? Cassirer believes that it is necessary to look for common in the *creative process*, thanks to which one or another form of culture is created: "Philosophy can give them (individual sciences – *D.B.*) complete autonomy, freedom and their own legislation, since it does not want to limit or suppress any of these private laws. Instead, she wants to combine their totality into some kind of systematic unity and recognize it as such. Instead of 'things-in-itself' objects located on the "other" side of the world of phenomena, she seeks the multiplicity, completeness and inner diversity of the 'phenomenon in itself' "<sup>165</sup>.

Are symbolic forms a kind of fog and barrier separating a person from being? Is it possible to bypass the mediator in the form of language and the world of culture in order to "breakthrough" to true and immediate reality? Cassirer answers negatively to this question. He is sure that if we removed the intermediary in the form of symbolic forms, then "we would not be met with a wealth of pure intuition, the untold fullness of life itself, we would only be again covered by the narrowness and limitations of sensual consciousness"<sup>166</sup>.

#### 1.10. Symbol-concept

In order to define the symbol, a main concept of Cassirer's philosophy, we turn to his late work "An Essay on Man" published in the USA in 1944. In "An Essay on Man" Cassirer asks: how is man different from animals in terms of biology? Answering this

<sup>&</sup>lt;sup>165</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 23. (In Russian).

<sup>&</sup>lt;sup>166</sup> Cassirer E. The concept of symbolic form in the structure of the sciences of spirit // Cassirer E. Favorites: Individual and Space. P. 412. (In Russian).

question, the philosopher cites as an example the theory of the German biologist Jacob Ikskül<sup>167</sup>. His theory states that each animal is adapted to the external environment through a special functional closed-circuit system of receptors and a system of effectors. Balancing these two systems allows the body to survive, forage for food and be part of the animal kingdom. A person differs from an animal in that he has a different way of adapting to the world around him. A person "has a third link between the system of receptors and effectors, which can be called a *symbolic system* (author's italics – D.B.)"<sup>168</sup>. In a person, between the stimulus and the reaction, there is a delay and inhibition of the external signal. The result of such a delay is special thought processes that distinguish it from an animal. A person's home is not the natural environment, but a *special symbolic reality*.

The whole history of mankind is the path of complication and development of such a symbolic reality. With each century and millennium, the distance between the biological, once the native home of man, and the symbolic worlds is growing. Great thinkers of the past called man-animal rationale – a rational animal. Cassirer believes they were right, but only partly. Thoughts and ideas, strictly rational and logical thinking were not originally given to man. Initially, the man was given a world of feelings, emotions and affects. Thus "rational animal" is not an appropriate term. Cassirer calls man an animal symbolicum – a symbolic animal. Why is a person not rational, but a symbolic animal? Cassirer replies: "Reason is a very inadequate term for the all-encompassing designation of forms of human cultural life in all its wealth and diversity"<sup>169</sup>.

Experiments on animals prove that higher mammals are still capable of an indirect reaction in relation to an external stimulus. For example, Pavlov proved the existence of a conditioned reflex in dogs. But what is the difference between an animal and a person? Compared to humans, *animals do not have signs with an objective referent*. In other

<sup>&</sup>lt;sup>167</sup> Jacob Johann Ixkühl (1864–1944) was a German biologist, zoopsychologist and philosopher, founder of zoosemiotics and biosemiotics.

<sup>&</sup>lt;sup>168</sup> Cassirer E. Favorites. An Essay on Man. P. 470. (In Russian).

<sup>&</sup>lt;sup>169</sup> Ibid. P. 472.

words, the animal is not able to distinguish anything by gesture or otherwise objectively for other animals (or humans). Animals are enclosed in its their own subjective world, and *their subjectivity is not able to become objectivity in contrast to humans*. A person is able, unlike an animal, to think about ratios (abstract objects), which is almost not observed in the animal world. The ability to compare two or more things speculatively and abstractly is a fundamental leap in the development of human consciousness. Wolfgang Köhler<sup>170</sup> conducted experiments on great apes. Based on his experiments, he concluded: that when comparing two feeders with food of different colors and distance from the animal, the latter showed the ability to select a large feeder. In other words, the animal was able to abstract color from magnitude and from shape. But one way or another, all attempts by animals to distinguish objects, to focus attention more than on one object, did not lead to the development of their symbolic ability to the extent that it is present in humans.

A person is able *to direct attention* to an individual object, differentiating a complex stream of sense data. Of the complex variety of images, a person has the ability to focus on one, isolate him from others and abstract the features of each image. A person is able *to distinguish* this image for other people, create new images and fill them with a special meaning. The perception of a separately allocated object as part of the whole population certainly puts a person in a higher category compared to animals, since a person is able to think in general concepts and categories.

What is the difference between a sign and a symbol? Cassirer identifies sign and symbol, referring to the work of one of the founders of semiotics Charles Morris<sup>171</sup> "The Foundation of the Theory of Signs"<sup>172</sup> (1938). According to Morris, a sign is part of the physical world, a symbol is part of the human world (world of meaning). The sign is an operator (sign carrier), the symbol is a designator (what the sign indicates). The sign always has a substantive nature and is concrete, the symbol is always abstract: "The

<sup>&</sup>lt;sup>170</sup> Wolfgang Köhler (1887-1967) - German and American psychologist, one of the founders of Gestalt psychology.

<sup>&</sup>lt;sup>171</sup> Charles William Morris (1903-1979) was an American philosopher, one of the founders of semiotics.

<sup>&</sup>lt;sup>172</sup> Morris Ch. The Foundation of the Theory of Signs // Encyclopedia of the Unified Sciences. Chicago: Chicago University Press, 1938. P. 1–59.

symbol does not have a real existence as part of the physical world it has only 'meaning'"<sup>173</sup>. There is always a strict unambiguous "hard" connection between the sign and the thing. For example, Pavlov's dogs reacted only to one *specific* sound signal, telling them to take food, and in humans "genuine human symbolism is characterized not by uniformity, but precisely by its variability: it is not cruel and static, but mobile"<sup>174</sup>.

Cassirer gives a rather general and concise definition of the symbol, defining it as *the unity of the sensual and the ideal* (Einheit von Sinn und Sinnlichkeit). In Cassirer's philosophy, a symbol is any representation, fantasy, memory, and even the simplest perception (if it turned out to be endowed with an ideal meaning). Cassirer believes that for the first time he realized his *symbolic* character, physical and mathematical knowledge. Heinrich Hertz in the preface to the "Principles of Mechanics" according to Cassirer, "extremely accurately formulated a new cognitive ideal, which orients the entire development of science. <...> the derivation of the future from the past is based on our construction of a special kind of 'internal ghostly images, or symbols' external objects and such that the mentally necessary consequences from them always become images of the naturally necessary consequences of the objects they display"<sup>175</sup>.

Comparing the concept of a symbol, as Heinrich Hertz defined it, with the definition of Cassirer, one should ask the question: if science separates itself from sensuality and moves in the world by itself created signs, then how are they related to sensuality? Cassirer shows that at first glance, the symbol in the natural sciences is "divorced" from sensuality. But in fact, such a "gap" is only temporary. A pure sign system created in an ideal sphere *must always return and reconnect with sensuality* to create a symbolic form. Clearly, such a process of reuniting sensuality and meaning can be seen in the formation of a religious and scientific mindset<sup>176</sup>. The Soviet philosopher B. A. Focht, exploring the work of Cassirer, gives the following definition to the symbol: "According to the preliminary definition, *the symbol* is, according to Cassirer, *such a sign* and at the same

<sup>&</sup>lt;sup>173</sup> Cassirer E. Favorites. An Essay on Man. P. 507. (In Russian).

<sup>&</sup>lt;sup>174</sup> Ibid. P. 482.

<sup>&</sup>lt;sup>175</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 12-13. (In Russian).

<sup>&</sup>lt;sup>176</sup> Next, we are going to describe in detail the process of forming a scientific mindset. See sections 3.1–3.2.

time *such an image*, which, due to the peculiar combination in it of moments of sensuality (not only passive, but also active) with moments of pure activity of the spirit, contains, as it were, some *magical power*, the action of which *is assimilated* and even *created* for us the very being of the thing"<sup>177</sup>.

In the scientific symbolic form the ideal part of the symbol is associated with sensuality through logical and *functional mediations*, its task is to integrate and systematize sensory experience: "their 'internal imaginary image' takes the place of an external cast from objects, their mathematical physical symbol, and the requirement that we place on the symbols of physics, is not that they reflect a single sensually detectable existence, and that they should be combined with each other like this, so that by virtue of this, by virtue of the sequence necessary in thinking, *we can organize the totality of our experience into the system and master it* (author's italics – *D.B.*)"<sup>178</sup>.

# 1.11. About Intersubjectivity

Consciousness in Cassirer's philosophy is not an individual independent one like Kant, it is a universal collective consciousness: "The philosophy of symbolic forms proceeds from the premise that if there is some definition of the nature or 'essence' of a person, then this definition can only be understood as functional, not substantive. We cannot define man by any internal principle that establishes the metaphysical essence of man; nor can we define it by appealing to its innate faculties or instincts certified by empirical observation. The most important characteristic of a person, his distinguishing feature is not metaphysical or physical nature, but his activity"<sup>179</sup>.

The problem of intersubjectivity is presented by Cassirer as follows: "Other" exists *to the extent* that "I". There is no isolated individual consciousness of "I": "You and I exist only insofar as they exist 'for each other' since they are in some functional relationship of interdependence. And the fact of the existence of culture is a distinct

<sup>&</sup>lt;sup>177</sup> Focht B. A. The Concept of Symbolic Form and the Problem of Meaning in the Philosophy of the Language of E. Cassirer // Cassirer E. Favorites. An Essay on Man. P. 763. (In Russian).

<sup>&</sup>lt;sup>178</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 403. (In Russian).

<sup>&</sup>lt;sup>179</sup> Cassirer E. Favorites. An Essay on Man. P. 519-520. (In Russian).

expression and the most irrefutable evidence of this mutual condition<sup>"180</sup>. A feature of the symbol is its constitutive ability. Through individual volitional action, the subjective feeling of the individual gives the elements of the surrounding world meaning. Further, this value, corresponding to a sense data, is transmitted to other individuals and a social consensus is formed: specific values are fixed to specific parts of reality for the entire team. In other words, a symbol has a subjective nature, by transforming, it becomes part of an objective symbolic form for others. Due to the symbol, the selected item becomes generally significant.

Kant believed that the subject, due to categorical synthesis, considers himself and forms the concept of being. The subject in Kant's philosophy is free and constitutes himself. The problem of intersubjectivity in Kant is revealed only through the concept of the kingdom of goals. Such intersubjective relationships in Kant are associated with the moral and ethical sphere. Another in the Kant system arises only mentally, as part of the moral law<sup>181</sup>. Otherwise, Kant's nature of consciousness is individual. Cassirer's situation is different: the subject is born in a certain symbolic form. "Other" from birth gives the child ready-made values for the emerging images of the surrounding reality. By "drawing" these symbols into itself, the new individual then objectifies them back, but with distortion then he adds his own subjective experiences. Thus, the life of culture proceeds, giving rise to more and more semantic connections: "Individual individuals form a single whole, not because they are the same or similar, but because they work together on a common *task*<sup>\*182</sup>.

Let's move on to the analysis of the main symbolic forms: myth and language, since they are the foundation for building the sphere of scientific knowledge.

<sup>&</sup>lt;sup>180</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 51. (In Russian).

<sup>&</sup>lt;sup>181</sup> Enns I.A. The Problem of Intersubjectivity in the Philosophy of I. Kant // Bulletin of Tomsk State University. 2005. № 287. P. 88–90. (In Russian).

<sup>&</sup>lt;sup>182</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 71. (In Russian).

# **CHAPTER 2. CONNECTION BETWEEN MYTH AND LANGUAGE**

#### 2.1. Language as a Transcendental Function of Consciousness

Cassirer devotes the first volume of the "Philosophy of Symbolic Forms" to language. Why exactly from the language the author begins his trilogy, Cassirer explains in his late work "An Essay on Man" (1946): "in this world, speech ability occupies the main place. Therefore, it is impossible to understand the 'meaning' of the universe without understanding what language means. If we fail to find this path to peace – the path through language, not through the phenomena of nature – we will not reach true philosophy"<sup>183</sup>. Consciousness, faced with a variety of sense data, seeks to create certain "points" of constancy and certainty. This function is performed by the language, Cassirer writes: "*The name* is the first moment of constancy and duration, introduced into the (sensual – *D.B.*) manifold"<sup>184</sup>.

Researching language, Cassirer, mainly relies on the works of the German philosopher, anthropologist and linguist Wilhelm von Humboldt, whose works were largely devoted to the philosophy of language. According to Humboldt's theory language is a special organ of a person that cannot be studied in isolation. Language is an integral part of the whole, it must be considered in close connection with the worldview of a person. The languages of different people differ not only in terms of sounds and writing, but also in terms of worldview. Humboldt associated the origin of the language with the fact that the ability to think and speak was originally inherent in a person. He strongly rejected the theory of linear development of language, and took the position that the emergence of language is the result of a nonlinear qualitative leap. The German linguist was sure that there are were no "primitive" and "perfect" languages, and even the most archaic peoples had complex structures and rich linguistic arsenals for expressing their thoughts.<sup>185</sup>. Language has a special a priori status with Humboldt, Cassirer says this in

<sup>&</sup>lt;sup>183</sup> Cassirer E. Favorites. An Essay on Man. P. 571. (In Russian).

<sup>&</sup>lt;sup>184</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 21. (In Russian).

<sup>&</sup>lt;sup>185</sup> Galieva A.M., Ibragimova Z.Z. The Anthropological Nature of Language in Linguophilosophy V. von Humboldt // Scientific Notes of Kazan University. Series: Humanities. 2012. Vol. 154. № 1. P. 19–28. (In Russian).

"An Essay on Man": "Humboldt was neither a narrow specialist in the field of linguistic problems, nor a metaphysician, like Schelling or Hegel: he followed *the 'critical' method of Kant* (author's italics – D.B.), and did not immerse himself in speculation about the essence or about the origin of the language"<sup>186</sup>.

For Cassirer, Humboldt's ideas are important, as "for Humboldt the sound sign, which is the matter of any process of language education, is like a bridge between subjective and objective"<sup>187</sup>: we reproduce sound from our own soul, and this sound becomes part of the outside world. Cassirer took Humboldt's works as a basis, since the latter considered language to be something that could not reflect, but construct the diversity of the world. Cassirer follows Humboldt in that language performs a transcendental function of consciousness, is something that conditions our experience rather than being shaped by external stimuli. Language conceived by Cassirer "as a means of forming and 'objectifying' sense data"<sup>188</sup>.

The language begins its work by trying to accommodate the designated one in the densest form, in order to then reproduce it most accurately. Cassirer calls the first stage of language development – *mimic*. At this stage, the sense data and its meaning are given directly to consciousness in unity. The next stage is called *analogous*, in which language is freed from sensuality. Consciousness is no longer revealed in itself the content of the impression, its image is formed in the field of representations. At this stage, a mediating *difference* appears between the sound and its value, which allows us to subsequently arrange the values in *series*. The third stage of symbolic (or the stage of designation) arises when "instead of mimic or analogous, the stage of symbolic expression is first achieved, which, moving away from any resemblance to the subject, precisely in this alienation and departure acquires some new spiritual content"<sup>189</sup>. At this stage, the value is already separated not only from the sound, but also from the image, and moves in the abstract sign area. Let's consider in detail all three stages of the development of a

<sup>&</sup>lt;sup>186</sup> Cassirer E. Favorites. An Essay on Man. P. 582. (In Russian).

<sup>&</sup>lt;sup>187</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 27. (In Russian).

<sup>&</sup>lt;sup>188</sup> Ibid. P. 86.

<sup>&</sup>lt;sup>189</sup> Cassirer E. The concept of symbolic form in the structure of the sciences of spirit // Cassirer E. Favorites: Individual and Space. P. 399. (In Russian).

language. These three stages correspond to the three phases of language development, which Cassirer refers to as: the phase of sensory expression, the phase of contemplation and the phase of conceptual thinking.

Consider the first phase of sensory expression or the mimic stage of language development. Man, unlike animals, has the ability to gesticulate. When a person's gesture is first directed at an object, it highlights it simultaneously for itself and for others, and makes the object stand out and objective (generally significant). Mimic is a derivative of gestures, it is also one of the most important elements of language: "Language develops as a private area from a general desire for sensual-mimic self-expression, innate to a person who is not a fruit of reflection, but present in it unconsciously and regardless of his will"<sup>190</sup>. At the mimic stage, the language strives for close proximity to the sense data. Further development of the language is accompanied by the emergence of an as-yet-unarticulated sound expression. The sound gradually replaces the gesture and, freed from gestures, gains its freedom and becomes an independent element for expressing the feeling.

By the end of the first mimic stage, consonants begin to reflect perceptions: "*st* sounds regularly convey the impression of constancy and hardness, l – melting and fluidity, w – uneven and inconsistent movement"<sup>191</sup>, vowels – the distance of the subject from the speaker: "*a o i* and almost constantly denote more, but *e i* – less distance"<sup>192</sup>. At this stage, the meaning is still merged with the sound: "The language lives in a world of names, sound symbols with which certain meanings are connected. Giving unity and certainty to these names, the language seems to stop, giving relative stability to the variety of sensory experiences captured in this stream and held by the language"<sup>193</sup>. Between the first and second stages, a special act of *separation* of the ideal from the sensual takes place, which is necessary in order to "eradicate <...> the *identity* of reality and symbol"<sup>194</sup>. The language begins to free itself from sensual "shackles" and through the language "a

<sup>&</sup>lt;sup>190</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 77. (In Russian).

<sup>&</sup>lt;sup>191</sup> Ibid. P. 122.

<sup>&</sup>lt;sup>192</sup> Ibid. P. 123.

<sup>&</sup>lt;sup>193</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 21. (In Russian).

<sup>&</sup>lt;sup>194</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 119. (In Russian).

universal *symbolic* function shines through"<sup>195</sup>, which begins to reflect the deeper levels of the contemplated world.

At the second analogous stage or in the phase of contemplative expression, a language that has not yet completely freed itself from feelings begins to endow the world with categories of space, time and number. The logical chain of contemplation categories "space-time-number" is strictly consistent and in order for the language to highlight the world and make it a full-fledged mindset. Cassirer believes that space is the most important medium through which the construction of objective reality is carried out. Cassirer cites a scientific fact from child psychology to confirm his thoughts on space: when a child forms a grasping movement, it is often directed at objects that are very distant in space, which he cannot reach with his hand. This indicates that the child has not yet developed a sense of spatial contemplation, building a distance to objects. The "I" of the child is still merged with the sensually given reality surrounding it. But as soon as the language goes through the phase of expression (or the mimic stage), a person begins to make sounds, and then the first spatial perceptions begin. The child begins to separate himself from the world: "as soon as the child learns this function of representing the name, to catch what the 'name' is, and thereby his whole attitude to reality is transformed -afundamentally new attitude of the "subject" and "object" appears for him. Only now, objects that previously directly took possession of affects and will begin to move away and at this *distance* (author's italics -D.B.) they become accessible to contemplation in their spatial outlines and can be actualized in their qualitative certainty"<sup>196</sup>. Cassirer is confident that the transition from the mimic to the analogous stage should be strictly consistent. If we compare a person with an animal, then we can say with confidence that the animal is not able to perceive an artistic image, since they do not have the ability to contemplate space as a person. Animals do not have a proto-language in the form of demonstrative gestures, which means that the language cannot develop until the second analogous stage.

<sup>&</sup>lt;sup>195</sup> Ibid. P. 117.

<sup>&</sup>lt;sup>196</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 97. (In Russian).

In Kant's system, sensations are not given to us directly and by themselves, they take shape through a priori forms of sensuality: space and time. In this case, the language manifests itself in a similar way – as well as the a priori forms of Kant's sensuality: "Language does not create new means of expression for each new circle of meanings that opens up for it, on the contrary, its power lies precisely in the fact that it is able to process a certain material given to it in various ways, is able, without changing these methods meaningfully, to put them at the service of a different task and thereby give the material a new spiritual form"<sup>197</sup>. Language seeks conditions where and how to be expressed: "As if all mental and ideal ratios are comprehensible for linguistic consciousness only through projection onto space (author's italics -D.B.), through an analogous 'display' on it of these ratios"<sup>198</sup>. Even in the most initial pointing gestures, and then in the sounds made, there are already the first rudiments of indicating spatial ratios. Cassirer gives a lot of factual material regarding the structure of the languages of primitive peoples and shows the richness of the meanings of the verbal forms of their languages. The fact that some ethnic groups have several dozen verbs denoting the way they walk or sit literally means that verbs define space. Individual sounds in the form of consonants, for example, sounds m and n indicate the subject's aspiration inward, consonants p, b, t, d, in turn, outward. The appearance of articles in the language allows us to indicate an object in space. The article in some cases may even indicate the shape of the subject and its remoteness from the subject. The appearance of personal pronouns in "primitive" peoples also serves the function of pointing to objects in space. The pronoun "I" indicates the central spatial position of the speaking subject. It is important to note that "I" in this case does not indicate the identity of the thinking subject and "I". The talking subject does not separate himself from the world, putting "I" in the center is relative and conditional. For example, in Japanese, "I" means literally "in the middle" and the pronoun "He"/"You" means "there". A general scheme illustrating spatial remoteness is a circle in the center of which "I" is located and all other pronouns are located radially from the center.

<sup>&</sup>lt;sup>197</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 148. (In Russian).

With the emergence of time-dependent ratios in the language, the situation is somewhat different than with space. Cassirer explains this by the fact that temporary relationships cannot be detected in direct contemplation. An ideal sphere of representations should appear to describe temporal relations but when they are absent, temporal relations are merged with spatial ones. For example, in some languages the word "here" means the present tense "now". The pronoun "there" may indicate an event that is to occur in the future. Important is the moment when the polarization of two acts of consciousness appears, meaning the states "now" and "not-now". The state of "now" is an immediate mental act that captures the present moment. Compared to scientific knowledge, this state cannot be reduced to an equation or mathematical abstraction. The concept of time, expressed in "now" means the entire meaningful completeness of the "grasped" reality: "This (the concept of 'now' -D.B.) is not just a mental boundary point separating the past and the future 'now' has a certain internal duration, whose duration is determined by the possibilities of direct memory, a specific memory"<sup>199</sup>. The brief process of the development of the time-dependent structures of language can be described as follows: "At the first stage, consciousness is at the mercy of only the opposition of 'now' and 'not-now' not yet knowing any further differentiation; on the second, the distinction between certain temporal 'forms' begins, the *completed* action begins to separate from the *unfinished*, *constant* from the *transient*, so that a certain difference in *types of actions* is formed, until, finally, a pure relational *concept* of time as an abstract *concept of order* is achieved and various temporal degrees are not indicated with all clarity in their contrast and interdependence"<sup>200</sup>.

Cassirer believes that the temporal characteristics of the whole variety of reality are directly related to the variety of states of consciousness and their transition into each other. In this case, time is not abstract, but concrete. If the first important element of contemplation is sensually contemplated space, then the category of time is "layered" on space. The attachment of time to sensual (not abstract) space determines the subject's

<sup>&</sup>lt;sup>199</sup> Ibid. P. 150.

<sup>&</sup>lt;sup>200</sup> Ibid. P. 151.

purely subjective experience of time: "Denoting temporal definitions and ratios, language is at first entirely dependent on *space* mediation; from this intertwining with the spatial world also flows an attachment to the world of *things* conceivable as cash 'in' space. Therefore, the 'form' of time is expressed here as much as it is able to find support for itself in spatial and subject definitions"<sup>201</sup>.

The expression of a number appears in the language, completing the logical chain of contemplation categories "space-time-number": "Only the formation of a number as a *verbal sign* opens the way to comprehending its purely conceptual nature"<sup>202</sup>. In order for a number to become a mathematical abstract object, it must go a long way. The number at its base is firmly rooted in sensory expression. Cassirer is sure that two points serve as the basis for the appearance of the number. First, the number "originates from the human body and its parts, then to spread to the whole sensually contemplated world"<sup>203</sup>. The origin of a number came from the division of the human's body. Cassirer cites as an example the peoples of English New Guinea, in whom counting, starting from the fingers and toes, continues beyond their borders: counting goes to all parts of the body (ears, nose, back of the head, etc.). Having overcome the barrier in the form of the tenth finger of the right hand, the archaic person did not leave the bodily region and did not go into the abstract, but continued to count using other parts of the body and even objects of the outside world. Surprisingly, a number indicating an object may also indicate its shape. In the language of the Tsimshian Indian people, various kinds of numbers are used to count flat or convex objects, as well as animate and inanimate objects. Secondly, the division of representations into "You" and "I" serves as the basis for the occurrence of one and two. "You" and "He" in turn, for the number "three": " 'You' and 'I served as the basis for the initial development of the consciousness of the number"<sup>204</sup>. Cassirer is convinced that the pronoun "is the 'mainland rock of the creation of the language' "205. Beyond the I-You-On triad is already the contemplation of indefinite multiplicity. It is important to

<sup>&</sup>lt;sup>201</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 132. (In Russian).

<sup>&</sup>lt;sup>202</sup> Ibid. P. 159.

<sup>&</sup>lt;sup>203</sup> Ibid. P. 160.

<sup>&</sup>lt;sup>204</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 171. (In Russian).

<sup>&</sup>lt;sup>205</sup> Ibid. P. 178.

emphasize that the idea of a number basically has a sensual direct contemplation of reality, then the number is gradually freed from sensuality and is understood as a pure number and a pure ratio, that is, it becomes abstract.

When the space-time-number contemplation categories are finally formed, the language moves to the third *symbolic* stage (designation stage). Language enters the phase of expression of conceptual thinking. How do language structures shape conceptual thinking? To answer this question, Cassirer consistently rejects the ideas of nominalism, reducing the content of the concept to a word. Cassirer asks the following question: "are we given 'signs" according to which we divide subjects into classes *before* the formation of the language, or do they appear as a *result* of the formation of the language"<sup>206</sup>?

Following the logic of the German philosopher, language cannot have a generalizing function as the primary act of creating concepts (highlighting common features in representations), since individual and certain characteristics of things must already be realized to generalize features. In the development of this thought, Cassirer largely relies on the work of the German philosopher and psychologist Rudolf Lotze "Foundations of Practical Philosophy"<sup>207</sup>. Analyzing the aspect of the language responsible for the formation of concepts, Cassirer identifies two stages of the formation of concepts: qualifying and classifying (generalizing).

*The qualifying type* of language activity precedes the classifier and is the process of isolating individual and certain structures from the still unformed and direct data of consciousness: "Therefore, the initial and decisive work of the concept is not in comparing representations and combining them into species and genera, but in the ebb of impressions into representations"<sup>208</sup>. Language assigns a specific and unique meaning to an individual impression. As it was shown by Cassirer in the work "Cognition and Reality" scientific concepts basically have a *series* in which each element is obtained using ratio of another element according to a certain law. Cassirer is convinced that the same principle applies in language. Initially, independent and unrelated meanings of

<sup>&</sup>lt;sup>206</sup> Ibid. P. 218.

<sup>&</sup>lt;sup>207</sup> Lotze G. Foundations of Practical Philosophy. St. Petersburg: Type. M.I. Rumsha. 1882. 87 p. (In Russian).

<sup>&</sup>lt;sup>208</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 219. (In Russian).

impressions enter into complex relationships and form ratios on the basis of which the concept responsible for their *integrity* is formed: "Before a language is able to move to a generalizing and bringing a quotient under the general form of the concept, it needs a different, purely *qualifying* formation of concepts. Naming in the language is carried out not on the basis of the genus to which any thing belongs, but on the basis of any separate property snatched from the general visual subject content"<sup>209</sup>. It should be noted that the qualifying function of the language appears only at the end of the second analogous stage. It is important that consciousness forms an image, the ideal should separate from the sensual, since only the formed images enter into relationships with each other, lining up in *series*.

The variety of languages can be explained by the described qualifying function of the language. Each individual people have their own unique language, which is based on sensual impressions, endowed with a specific and unique meaning. On this occasion, Cassirer writes that words of different languages fundamentally cannot be synonymous. As an example, the German philosopher cites the word "moon" which in Greek is designated as "measuring" (Greek  $\mu\eta\nu$ ), and in Latin as "shining" (Latin *luna*). You can clearly see that this word is based on the Greeks and Latins, on the one hand, they the same impressions, on the other, they are completely different, as they have different meanings.

An important place in Cassirer's reasoning is the fact that language "casts" single impressions into meanings not only based on static contemplation of being. The basis of impressions is active *actions* that a person performs. Thus, "language concepts are everywhere on the border of activity and reflection, action and contemplation and not a reflection of the objective world around us, but one's own life and own actions. This is what really determines the language world"<sup>210</sup>. Feelings alone are not enough to form single and separate impressions. Each impression is permeated with an inner *will to act* and a focus on fulfilling the intended goal.

<sup>&</sup>lt;sup>209</sup> Ibid. P. 222.

<sup>&</sup>lt;sup>210</sup> Ibid. P. 224.

The second stage of linguistic education of concepts is the *classifying* or generalizing stage, which allows us to move from individual and individual impressions to generic types of concepts. This does not happen immediately, as indicated by such facts as the impossibility in some languages to combine individual names into a common genus. In some languages, there are hundreds of names of trees, but there is no concept that would combine them by common characteristics into a genus of trees. The presence of a common sound in the names of objects is the moment when a grouping function appears in the language (for example, the appearance of the same suffix) indicating the commonality of the names of objects. The classifying suffix in this case indicates a logical connection between objects on the principle of the presence of a common sound in the subject.

The classification of contemplated objects is not only due to the similarity of visual signs. There is also an aspect of *linguistic fantasy*, which, thanks to the power of imagination and through mythological and aesthetic motifs, is also able to form classes and genera: "Each name or verb necessarily belongs to one class or another, however, separation occurs not only on the basis of signs obtained as a result of empirical *observations*, but also with the decisive participation of mythological fantasy and mythological animation of nature"<sup>211</sup>. This kind of fantasy is able to divide objects into animate and inanimate, divide into feminine, neuter and masculine, etc. On this occasion, Cassirer writes: "This attribution to any cash register never occurs only through acts of perception and judgment, but always at the same time is determined by acts of affect and will, acts of internal *assessment*"<sup>212</sup>.

Contemplated objects, firstly, do not initially possess these features: the language exhibits an individualizing function and identifies individual impressions and assigns values to them. Secondly, language shows a grouping function of impressions not only on the principle of common external signs, but also by referring to complex mythological

<sup>&</sup>lt;sup>211</sup> Ibid. P. 236.

<sup>&</sup>lt;sup>212</sup> Ibid. P. 238.

motives, thirdly, concepts are formed not only from contemplation of objects of the surrounding world, but also from the inner world of the subject through volitional acts of *action*: "In a narrower sense, the linguistic formation of concepts differs from the logical form of the formation of concepts primarily by that exclusively static consideration and comparison of conceptual-substantive elements never plays a decisive role in it, since the pure form of "reflection" is constantly permeated in the language with *dynamic* motifs, – the fact that language never gets its essential impulses exclusively from the world of being, but constantly draws them from the world of action"<sup>213</sup>.

Language is inextricably linked with myth, so it is impossible to fully understand its essence without referring to myth. In this regard, we need to move on to the analysis of mythological thinking described in the second volume of the "Philosophy of Symbolic Forms" called "Myth" (the original title of the second volume sounds like "mythological thinking" (Das mythische denken)).

### 2.2. Myth as a Special Kind of Reality

Ernst Cassirer already had some sketches and intuitions about his future concept of the "Philosophy of Symbolic Forms" before the decisive moment when he met with the library of Aby Warburg <sup>214</sup> in 1920. Throughout his life, Warburg collected material for this library, classifying books into different sections (anthropology, religion, art, etc.) and in one of the brochures dedicated to the library there were the following words: "The book collection was supposed to take us away from the visual image (Bild), as from the first stage of human cognition, to the language (Wort), and then to religion, science and philosophy, each of which was the result of a person's desire to realize his place in the world (Orientierung), which influenced the manner of behavior of a person and his actions, which is the subject of history" <sup>215</sup>. Many researchers such as A. W.

<sup>&</sup>lt;sup>213</sup> Ibid. P. 224.

<sup>&</sup>lt;sup>214</sup> Aby Warburg (1866–1929) - German art historian, ethnographer, culturologist and creator of the library, which later became a research center and institute bearing his name (The Warburg institute).

<sup>&</sup>lt;sup>215</sup>Cit.: Cassirer E. Philosophy of symbolic forms: Introduction and formulation of the problem // Cultural Studies. XX Century: Anthology. M.: Lawyer, 1995. P. 158. (In Russian).

Weinmeister<sup>216</sup>, R. N. Parkhomenko <sup>217</sup>, A. A. Kravchenko <sup>218</sup> noticed the significant influence of the Warburg library on Cassirer's theory. In a lecture delivered by Cassirer himself at the Warburg Institute (after the release of three volumes of the "Philosophy of Symbolic Forms") in 1936 in London<sup>219</sup> there were words confirming this thesis: "I remember very well the day when many years ago I, directed by my friend Dr. F. Saxl <sup>220</sup>, first went through the library (Warburg's library – *D.B.*) of this institute. This made a strong impression on me: it was the impression that prompted me to undertake the work that I had been thinking about for many years, namely to give [her] a systematic analysis"<sup>221</sup>.

The question of what should be considered primary in Cassirer's philosophy, language or myth, is debatable in the scientific community. According to Warburg's logic, according to which his library was classified into sections, one can build a triad: "language-myth-science" which will repeat the sequence of titles of Cassirer's volumes ("language-myth-phenomenology of knowledge"). Cassirer himself points to the inextricable connection between myth and language, explaining this by the fact that in the formation of clans and classes not only external signs are used, but also the inner world of fantasy, the basis of which are mythological motives and plots: "The question of the 'origin of the language' is inextricably intertwined with the question of the 'origin of the myth' – both of them, if they can be posed, then only together, in mutual correlation with each other"<sup>222</sup>. Researchers of Cassirer's work have different points of view regarding what is primary in the work of the philosopher. In the scientific community, there are three positions on this issue: that Cassirer's language and myth are inextricably linked with each other (A.V. Isaeva<sup>223</sup>, S. Luft<sup>224</sup>), that language is primary to myth (H. Kuhn<sup>225</sup>),

<sup>&</sup>lt;sup>216</sup> Weinmeister A.V. Symbolic Interpretation of Culture in the Concept of E. Cassirer and A.F. Losev. P. 42. (In Russian).

<sup>&</sup>lt;sup>217</sup> Parkhomenko R.N. Man as a Subject of Culture in the Philosophy of E. Cassirer. P. 82. (In Russian).

<sup>&</sup>lt;sup>218</sup> Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge. P. 121. (In Russian).

<sup>&</sup>lt;sup>219</sup> The A. Warburg Institute moved to London in 1933.

<sup>&</sup>lt;sup>220</sup> Friedrich Saxl (1890-1948) was an Austrian and British art historian, a follower of A. Warburg and a close friend of E. Cassirer.

<sup>&</sup>lt;sup>221</sup> Cassirer E. Lectures in Philosophy and Culture // Cultural Studies. XX Century: Anthology. P. 155. (In Russian).

<sup>&</sup>lt;sup>222</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 9. (In Russian).

<sup>&</sup>lt;sup>223</sup> Isaeva A.V. Myth in the Philosophy of E. Cassirer. (In Russian).

<sup>&</sup>lt;sup>224</sup> Luft S. Cassirer's Philosophy of Symbolic Forms: between Reason and Relativism.

<sup>&</sup>lt;sup>225</sup> Kun X. Ernst Cassirer's Philosophy of Culture // Cassirer E. Favorites: Individual and Space. P. 617. (In Russian).

that the myth is primary to the language (M.E. Soboleva <sup>226</sup>, E. Skidelsky <sup>227</sup>). For our research, the question of the primacy of language or myth is not essential, since the focus of our attention is the genesis of scientific knowledge and its comparative characteristic with mythological consciousness.

Myth precedes the emergence of philosophy. Philosophy, which originated in the era of antiquity, at first opposed the myth. In the time of the Elean school, the tension between philosophy and myth reaches its highest point. The tension between "newfound" philosophy and myth was subsequently resolved in favor of an allegorical interpretation of myth. The speculative-allegorical interpretation of the myth was then continued by Neoplatonists, Stoics and philosophers of the Middle Ages and Renaissance. Almost the only philosophers who interpreted myth not as an allegory, but as *one of the forms of knowledge* were Plato and George Gemist Plifon. Their philosophy is closely intertwined with mythology and merges into a single whole. In the modern era, Giambattista Vico presents the spirit as the trinity of language, art and myth. Vico's ideas were received and adapted by romantics and were further developed and disseminated.

Cassirer is convinced that the theory of myth has reached its climax in Schelling's philosophy, in work "Philosophy of Mythology" in which the allegorical principle of interpreting myth is overcome in its fullest form: "He (Schelling – D.B.) replaces the allegorical interpretation of the world of myths with 'tautegorical' i.e. interpretation that takes mythological figures as autonomous creatures of the spirit, which should be understood from *themselves* (author's italics – D.B.)"<sup>228</sup>. Since Schelling, myth in philosophy is no longer the product of fantasy or subjective representation, is not a poetic or philosophical fiction, and is not a collection of subjective psychological effects. Cassirer emphasizes that thanks to Schelling, myth becomes *a special kind of reality*.

For Schelling, myth is above all a phenomenology of religious consciousness. From a young age, Schelling was tasked to create a mythology of reason that would combine "monotheism of mind" with "polytheism of the ability of imagination". Schelling

 <sup>&</sup>lt;sup>226</sup> Soboleva M.E. Philosophy of Symbolic Forms E. Cassirer and the Formation of non-Classical Philosophy. (In Russian).
 <sup>227</sup> Skidelsky E. Ernst Cassirer: The Last Philosopher of Culture. P. 115.

<sup>&</sup>lt;sup>228</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 17. (In Russian).

believed that myth is a form of life that is neither part subjective nor part objective, but is on the *border* of both. According to Schelling, a myth is a subjective one that becomes objective. Human consciousness itself attaches importance to both elements of selfawareness (subject) and elements of the world (object). For Schelling, the object and subject, perfect and real in myth, are the same. Myth for him is a total and comprehensive Absolute, exercising spiritual power over consciousness, and even over the people. It is the myth that determines the history of the people and their fate. Cassirer writes that in Schelling's work, myth is "a force *real* in relation to consciousness, i.e. no longer in his power, dominating him in myth"<sup>229</sup>.

The myth is present only in the consciousness of a person, inside the subject experienced by him. Schelling writes: "The theogonic process in which mythology arises is a *subjective* process insofar as it is performed in consciousness and manifests itself in generated ideas, but the causes and objects of these ideas are theogonic forces in *themselves, in reality*, these are the very forces through which consciousness is originally God-believing consciousness. The content of the process is not such potencies that would simply appear, but *the potencies themselves*, which create consciousness and, since consciousness is only the edge of nature, create nature, and therefore the essence of real forces. The mythological process does not deal with *objects* of nature, but with those pure creative potentials, the initial generation of which is consciousness itself<sup>5230</sup>.

Schelling's "Philosophy of Mythology" had a significant impact on research on the myth of Cassirer and served as a solid basis for his study of the phenomenology of mythological consciousness.

At the beginning of The "Myth", Cassirer notes that his first volume on language had the scientific research of Wilhelm von Humbolt as a guiding thread, and the author did not have such authority to analyze the myth. Despite a bold attempt to consider the myth *from the inside*, Cassirer believes that romantics (and even Schelling) still could not fully overcome the allegorical principle of interpreting the myth. Cassirer sets the task of

<sup>&</sup>lt;sup>229</sup> Ibid. P. 18.

<sup>&</sup>lt;sup>230</sup> Schelling F.V. Y. Works in 2 volumes. M.: Thought, 1989. Vol.2. P. 335. (In Russian).

continuing research into myth and seeking a common *law* inherent in mythological consciousness. The German philosopher directs his efforts to find a deep structure of myth that would be common to particular manifestations of mythological fantasy. It is the concept of *function* that is this deep structural form: "the desired unity is mistakenly placed in the constituent elements, instead of directing the search to a characteristic form, which just creates from these elements a new spiritual whole, a world of symbolic 'meaning' "<sup>231</sup>.

In order to move on to the analysis of mythological consciousness and reveal its connection with the structures of language, let us dwell on the concept of sensory perception of Cassirer.

## 2.3. Bidirectional Type of Perception

Cassirer perception has a complex and bidirectional structure. Cassirer writes: "it remains undoubted that in building the world through our perception we can distinguish between a double *orientation* – one that leads to an objective image of the world with constant things and properties, and the other that goes in a certain opposite way"<sup>232</sup>. The formation of such a concept of perception on Cassirer was influenced by one of his teachers and founders of the Marburg school of neo-Kantianism Paul Natorp, who in work "General Psychology"<sup>233</sup> described the cognitive act as a bidirectional flow with "plus" and "minus". Paul Natorp describes perception as follows: "The attitude of the opposition becomes a relationship, meaning at the same time the necessary correlation. In this correlation, the 'minus' direction no longer means a decrease, regression almost to a zero degree of consciousness. Rather, it will be said that the expansion on the periphery corresponds to a depression in the center, a return to the original source. Everything that was found on the path of objectifying knowledge is not lost here at all; rather, what seemed lost, including the 'subjective' in the bad sense of the word, is again involved

<sup>&</sup>lt;sup>231</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 32. (In Russian).

<sup>&</sup>lt;sup>232</sup> Cassirer E. On the question of the logic of the symbolic concept // Cassirer E. Favorites: Individual and Space. M.; St. Petersburg: University Book, 2000. P. 425. (In Russian).

<sup>&</sup>lt;sup>233</sup> Natorp P. Allgemeine Psychologie Nach Kritischer Methode. Erstes Buch: Objekt Und Methode Der Psychologie. Charleston: Nabu Press, 2011. S. 145.

back in the process of cognition and gets its rights, and all the newfound persists and connects with everything else. Thus, the overall content of consciousness does not decrease, but multiplies, becoming richer and more intense<sup>234</sup>.

Cassirer places special emphasis on the concept of perception of P. Natorp. "Plus" denotes the direction of consciousness to the object. Objects in this case are known on the basis of common features as the "world of things". Cassirer calls this method of cognition "objective" (Dingwahrenehmung), on this path consciousness identifies common signs in subjects and forms common classes. Thanks to this logical-discursive way of forming concepts, a kind and kind are formed. Any single thing is included in the totality, equalized with other things and loses its special essence. This type of perception *expands consciousness* by increasing the coverage of individual representations and is *quantitative* in nature.

"Minus" means the direction to the subject from the object. Objects in this case are known as a special "world of living personalities" that affects a person. The world in this case appears as "equal to us" and consciousness reacts to it through feelings-emotions. Cassirer calls this perception "emotional" (Ausdruckwahrenehmung). It is important to note that this type of perception allows us to master the world precisely through *emotions*, and not feelings-sensations. In the process of such perception, a person endows an object affecting him with an individual essence. The result of this perception is unquantifiable and *qualitative*.

Cassirer's perception structure is dialectical and has a dual nature: "Undoubtedly, depending on the direction in which we move, the feeling acquires one or another meaning for us and, accordingly, one or another color and tonality"<sup>235</sup>. Cassirer concludes that in the myth preceding the emergence of scientific knowledge, emotional perception prevails over substantive. At the same time, the subject, discursive part of perception is also present and manifests itself fully in the formation of classes of objects. The idea of such a dual perception allows us to reject the thesis of the French philosopher and

<sup>&</sup>lt;sup>234</sup> Cit.: Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 52. (In Russian).

<sup>&</sup>lt;sup>235</sup> Cassirer E. Favorites. Logic of Cultural Sciences. P. 42. (In Russian).

anthropologist Lévy-Bruhl, who considered mythological thinking "dologic" that is, devoid of a discursive type of thinking. Cassirer writes about this: "the thesis of the inevitable longitude and mysticism of primitive thinking <...> conflicts with the anthropological and ethnological evidence of our days. In many areas of primitive life and culture, we find manifestations of our own, well-known features of cultural life. It is hardly possible to realize this fact, if we assert the absolute heterogeneity of our own logic and primitive logic, if we consider them radically different and opposing each other. Even in primitive life, we always find, in addition to the sacred sphere, profane or secular sphere, and it is a secular tradition that establishes customs and legitimizes the rules that determine the ways of managing social life"<sup>236</sup>.

Due to the dual structure of perception of the same subject, consciousness can give *several completely different meanings*, and this is true in relation to each of its symbolic functions. If we consider the myth as such a symbolic function of consciousness, then all its phenomena in their original sensual given will also appear to us as dual – sacred (divine, comprehended emotionally) and profane (worldly, comprehended objectively): "This dual character leads to the fact that the sacred, clearly separating from the empirical 'profane' existence, does not just *repel* him in this separation, but progressively permeates it; even and it is in this opposition that it retains the ability to *structure* what is opposed to it"<sup>237</sup>. Objective perception differs from emotional perception in that the subject is reduced to its visible spatial surface, it has *no depth* (in spiritual meaning), it is completely excluded from consideration; a personality is precisely an object that has a certain mysterious acting depth, and this depth is *sensually comprehended in an emotion* that appears undisclosed and indefinite for consciousness.

It is important to note that two aspects of perception are present in a person *at the same time*, and this is true for any symbolic form; in each of them, the ratio of the two forms of perception is different. For example, in mythological consciousness, the emotional part of perception prevails over the subject, in religious consciousness, on the

<sup>&</sup>lt;sup>236</sup> Cassirer E. Favorites. An Essay on Man. P. 533–534. (In Russian).

<sup>&</sup>lt;sup>237</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 93. (In Russian).

contrary, the subject prevails over the emotional. In the scientific mindset, starting from the era of the New Age, the emotional aspect of perception is minimized, the substantive (discursive) part of perception is most manifested. This or that aspect of perception is inextricably linked with the development of language. As we showed above, initially a person is given the emotional aspect of perception, thanks to which a person is able to name objects, that is, attribute them a characteristic essence. The subject aspect of perception begins to develop in the second, and is finally formed only in the third, symbolic stage of development.

The described bidirectional nature of perception allows us to proceed to a detailed analysis of the connection between myth and language, as well as describe the origin of the "Sacred" the central category of mythological consciousness.

## 2.4. The Sacred and the Profane

In sociology, religious studies and philosophy, the terms Sacred and Profane are widespread. The term Sacred comes from lat. Sacrum as divine, sacred, dedicated to God or gods. The term sacred has several aspects: ontologically, Sacred goes back to the highest superhuman level of existence (in the metaphysical sense, it has *another* mode of existence), epistemologically encapsulates true knowledge, phenomenologically what fascinates consciousness, makes you experience strong emotions of fear or admiration, as well as what makes objects stand out and *filled with the highest meaning for consciousness* and axiologically (from the point of view of value theory) encapsulates what has the highest value for society and the individual<sup>238</sup>.

The first scientist who theoretically described the concept of Sacred was the founder of the French school of sociology Émile Durkheim. His work is widely known as "The Elementary Forms of Religious Life"<sup>239</sup>, in which the author shows that in the worldview of even the most 'primitive" archaic ethnic groups there is always a special kind of division of the world into two spheres: ideal (sacred) and real (profane), which are in

<sup>&</sup>lt;sup>238</sup> Binevsky I.A. Dialectics of the Sacred and Profane in the European Sociocultural Process: dis.... cand. phil. sciences. M., 2012. P. 17. (In Russian).

<sup>&</sup>lt;sup>239</sup> Durkheim E. Elementary Forms of Religious Life. M.: Elementary Forms, 2018. 808 p. (In Russian).

opposition to each other. Emil Durkheim describes the process of giving to object sacred qualities: "The sacred character that an object is endowed with is not something that is inherent in itself: *it is endowed with them*. The world of religious things does not form a particular aspect of empirically given nature; *it's built over it*"<sup>240</sup>. Durkheim reveals the most important sign of the sacred, that it is prohibited. In other words, the Sacred becomes isolated from the profane world by a special system of prohibitions (taboo). The sacredness of some phenomenon or the prohibition of any actions in relation to the first is a kind of built social and collective consensus between representatives of the ethnic group. Thus, Durkheim concludes, that Sacred is a purely social phenomenon. It is society that endows something with sacred qualities. According to Durkheim, Sacred outside the society does not exist. It is important to emphasize that the Sacred is not just an emotionally neutral collective sign in relation to any phenomenon, it is emotionally ambivalent: either frighteningly nasty and disgusting, or what causes fascination, fascination, agitation and other super-intense feelings.

The philosophical interpretation of the sacral phenomenon is associated with the German Protestant theologian and philosopher Rudolf Otto. Otto's work was influenced primarily by three people: Kant, F. Schleiermacher and neo-Kantian J. F. Fries. Following the method of Kant, Otto built an a priori concept of the category "sacred". According to Otto, religious feeling arises from a mixed sense of animal horror and amazement at the unknown and mysterious: "mysterium tremendum" and "mysterium fascinosum"<sup>241</sup>. Before any experience, our consciousness has the category of Sacred which is a synthesis of rational and irrational aspects. The irrational aspect in this case is a priori, primary to consciousness and gives rise to the experience of the Sacred. After experiencing the experience of the creature, admiration or horror of the subject's collision with a completely different one (Ganz Andere), the subject connects a rational means to describe and systematize the experience of the Sacred. According to Otto, without the original a priori irrational component and only with the help of the rational apparatus of thinking,

 <sup>&</sup>lt;sup>240</sup> Cit.: Binevsky I.A. Dialectics of the Sacred and Profane in the European Sociocultural Process. P. 19. (In Russian).
 <sup>241</sup> Otto R. On the Irrational in the Idea of the Divine and its Relationship with the Rational. St. Petersburg: ANO Publishing House of the St. Petersburg University, 2008. 272 p. (In Russian).

the concept of Sacred cannot arise. On this occasion I.V. Khalzova writes: "Faith (in the Otto's theory – D.B.) is reasonable, but not rational"<sup>242</sup>. The irrational side of the sacred is associated with the *numinous* (from Latin *numen* which means spiritual or religious), which manifests itself in three aspects: as frightening, as something other and different, and as fascinating. Placing the Sacred in the realm of the a priori, Otto abandons concepts that reduce this concept to rational and social principles. Otto believes that the concept of Sacred is the initial semantic core on which a cultural value superstructure is built in society: "Such is the numinous value, the irrational primal basis and primary sources of all possible objective values in general"<sup>243</sup>. The true essence of the numinous is elusive, it is similar to Kant's "thing-in-itself". The work Sacred by R. Otto is still a landmark work in the field of philosophy, it has influenced many generations of philosophers, sociologists and religious scholars.

Thus, according to Durkheim, Sacred is a purely social phenomenon, according to Otto, it belongs to the field of a priori and is the basis of the social value superstructure in society. Ernst Cassirer develops a completely different approach to the interpretation of this category. His theory of the symbol, developed in the "Philosophy of Symbolic Forms", allows us to abandon the a priori concepts of Sacred as well as to reveal the connection of Sacred with the structures of language, and the concept of sensory perception of the German philosopher allows us to naturally explain the dichotomous division of the world into Sacred and Profane from a phenomenological point of view.

Cassirer in the article "Language and Myth. To the Problem of Naming Gods"<sup>244</sup> analyzes in detail the process of naming gods. In this case, Cassirer believes that the analysis of the language opens the way to determining the essence and origin of the Sacred. In his reasoning, Cassirer refers to the German philologist Hermann Usener<sup>245</sup>. Cassirer writes about Usener: "many of his private interpretations were unreliable and

<sup>&</sup>lt;sup>242</sup> Khalzova I.V. The Concept of the Sacred in the Works of Rudolf Otto and Protopr. Alexander Schmeman // In the Collection: XXVII Sretensky Readings. Materials of the All-Russian (National) Scientific and Theological Conference with International Participation. St. Philaret Orthodox Christian Institute. Moscow, 2021. P. 318. (In Russian).

<sup>&</sup>lt;sup>243</sup> Otto R. On the Irrational in the Idea of the Divine and its Relationship with the Rational. P. 91. (In Russian).

<sup>&</sup>lt;sup>244</sup> Cassirer E. Language and Myth. To the Problem of Naming Gods // Cassirer E. Favorites: Individual and Space. P. 327– 390. (In Russian).

<sup>&</sup>lt;sup>245</sup> Hermann Karl Usener (1834-1905) was a German philologist.

controversial, but he managed to clearly and clearly capture the main trend in the phenomenology of mythological consciousness"<sup>246</sup>.

Usener believed that philosophy does not answer the question of how concepts are formed. According to Usener, philosophers use ready-made and formed aggregates and do not wonder how disparate units are combined into genus and species. Usener puts and solves this issue from the standpoint of philology and linguistics. Analyzing the process of assigning names to gods in the work "Names of the Gods"<sup>247</sup> among various peoples of the world, Usener distinguishes three phases. The oldest phase in the development of mythical thinking is the formation of "gods of the moment". Such a god is singular and momentary, he manifests himself in short and brightly emotionally intense moments. Fascination, mania, admiration are the attributes of this deity. It is *unique, momentary* and *singular*. Usener describes the "gods of the moment" as follows: "What suddenly appears to us as a command from above, which fascinates us, which saddens and oppresses, appears before the increased power of sensation as a divine being. Throughout the history of the Greeks known to us, they defined this by a generic concept  $\delta \alpha \mu \omega v$ "<sup>248</sup>. At this first stage, the emotional part of perception is actively manifested, the subject part of perception is minimized.

Such momentary gods, which suddenly appear and also suddenly disappear, are replaced by another series of gods arising from ordered human activity. When a person ceases to be passive and breaks out of captivity of external impressions, he begins to conduct conscious active activities aimed at transforming the world. The systematization of human activity allows the grouping of gods around such activity. Gods appear as patrons of this kind of action. Usener calls them "special gods". They do not yet cover all being with their patronage, they are still local and grouped around cultural activities. Usener believes that such gods, formed in accordance with the type of their activity, manifest themselves in all peoples of the world according to the same principle. The finale

<sup>&</sup>lt;sup>246</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 93–94. (In Russian).

<sup>&</sup>lt;sup>247</sup> Usener H. Göternamen. Versuch einer Lehre von der religiösen Begriffsbild-ung. Bonn: Verlag von Friedrich Cohen, 1896. 391 s.

 <sup>&</sup>lt;sup>248</sup> Cit.: Cassirer E. Language and Myth. To the Problem of Naming Gods // Cassirer E. Favorites: Individual and Space. P.
 337. (In Russian).

of the second stage is the materialization of these gods. From the world of imagination, they enter the outside world and become like a specific person – an artisan. At this stage, the subject part of perception is included in the work, transforming the emotional.

At the third stage of the development of mythical consciousness, an idea of a personal God appears, which unites all types of activities and is the creator of all contemplated external objects. At this stage, the subject part of perception becomes no less important than the emotional one.

Cassirer places accents in Usener's concept in his own way. He introduces a particularly important new motive into the description of the formation of the "gods of the moment". When a person meets something else for him, an external object with high emotional intensity captures consciousness, filling everything with itself. Perception narrows to one point and in the process of such narrowing the object is endowed with an individual essence according to the main feature highlighted by consciousness. Everything that is outside of such a focus goes out and becomes invisible. Man "is captured by this mythical-religious contemplation, for him the whole world disappears"<sup>249</sup>. Everything outside the focus of perception becomes overlooked due to the fact that language differentiates only the essence of the object and does not differentiate other phenomena outside the focus. Consciousness does not expand, Cassirer believes, but, on the contrary, becomes narrow: "In this concentration of all forces at one point is the condition of all mythical thinking and all mythical formation"<sup>250</sup>. Consciousness, mesmerized by a high-intensity sense data, as if draws it into itself: "tension resolves as subjective excitement objectifies, faces a person like a god or a demon"<sup>251</sup>. Having drawn in everything that fills the impression, consciousness concentrates and narrows it into a certain image, which later "carries" with it in the form of the name of god: "As if through the isolation of the impression, its isolation from a whole ordinary everyday experience, in it, along with its powerful intense strengthening, an external *compaction* arises and as if as a result of this compaction, an objective image of a god arises, as if he jumps out of

<sup>&</sup>lt;sup>249</sup> Ibid. P. 348.

<sup>&</sup>lt;sup>250</sup> Ibid. P. 348.

<sup>&</sup>lt;sup>251</sup> Ibid. P. 351.

it"<sup>252</sup>. The form of the "god of the moment" is objectified through word and mythical sensual image. In this way, language and mythical images relieve the inner tension of a person. The "god of the moment" accommodated and concentrated in the image of consciousness, becomes an independent being. His image is gradually becoming clearer and more detailed in order to become a cult subject. Such "gods of the moment" correspond to the beginning of the second, analogous stage of the language and their origin is accompanied by an emotional type of perception.

In the mythological consciousness the "gods of the moment" enclosed in a word and image, eventually lose their emotional influence on a person and transform into stable single "points of meaning" which subsequently line up in series – grouped integrity. It is important to note that, moving to the second stage from the "gods of the moment" to the "special gods" the mythological consciousness begins to group objects not according to their external similarities, but according to their involvement in a particular action: "Connection in being occurs in accordance with actions, therefore, not based on the "objective" similarity of things, but according to how the contents are comprehended through actions and brought into a certain connection"<sup>253</sup>. The connection occurs due to the *teleological* nature of human actions. Single impressions, united by one purposeful action, will receive special language accents indicating this activity. For example, the "special god" associated with tree felling manifests itself in the language as a special enda suffix: "The Roman Arval brothers divided at the act of atonement for the destruction of trees in the forest of the goddess Dia the action into a number of separate acts, at each of which they called to his separate deity: Deferenda was responsible for felling, Commolenda for felling, Coinquenda for splitting and Adolenda for burning unnecessary parts of trees"<sup>254</sup>. Passion for transforming nature, cultivation, plowing, craft are the attributes of "special gods" the core of whose education is the will and desire of man.

It is the reflection on Usener's concept that leads Casirer to understand the fundamental importance of a pair of sacred-profane categories for the implementation of

<sup>&</sup>lt;sup>252</sup> Ibid. P. 348.

<sup>&</sup>lt;sup>253</sup> Ibid. P. 351.

<sup>&</sup>lt;sup>254</sup> Ibid. P. 353.

the symbolic functions of myth and language. Refining Usener's concept, Cassirer believes that the "gods of the moment" are not man's first encounter with the divine. The idea of a super-natural force - mana that can freely flow from one thing to another suggests that initially the "divine" is not before consciousness in a specific and differentiated form. The "gods of the moment" are personified and individualized, which means they have already been reduced to the final image: "If the 'god of the moment' is the first relevant education in which the mythical-religious consciousness is alive and creative, then this relevance is based to a certain extent on the general potential of the mythical-religious feeling. The separation of the world of the Sacred and the world of the Profane for the first time created a prerequisite for the formation of separated certain images of the gods"<sup>255</sup>. Man before the appearance of the "gods of the moment" is in an undifferentiated atmosphere of Sacred spilled around the world. Myth, Cassirer says, is at this time in the "anonymous" and silent stage, and language defines Sacred with only one word. Proof of this is that the "divine" is denoted by one word mana among the Melanisians, wakanda among the Sioux Indian people and orenda among the Iroquois. Max Müller (1823-1900) German and English philologist and religious scholar interpreted the concept of *mana* as "infinite". He believed that an archaic person in every (even tactile) sensory act was in contact with divine "infinity" capable of flowing smoothly and dynamically from one impression to another. Cassirer says Mueller was wrong. Mana has nothing to do with religious and philosophical infinity. In fact, the idea of mana is entirely connected not with "infinity" but with "uncertainty". And the fact is that the concept of *mana* goes beyond the limits of *linguistic certainty*. Mana is present before the language enters the work, the function of which is to act as a mediator between the outer and inner worlds of man.

Bypassing the phase of the indefinite Sacred spilled around the world, the language concentrates the Sacred into one personal image of the "god of the moment" and "casts a personal impression" into one word, *thereby making the god objective and distinguished for all members of society.* In the image of such a god, the subjective (individual)

<sup>&</sup>lt;sup>255</sup> Ibid. P. 368.

impression, expressed in a word, of a representative of a society is recorded. The transition to "special gods" through periodic and directional activity is accompanied by the addition of suffixes and prefixes to the words, indicating the commonality of the god. Grouped by collective activity "gods of the moment" transform into "special gods". When moving to the third stage, a personal single God-creator appears, which receives many attributes previously belonging to "special gods" where the subject (rational) part of perception already prevails. Initially common to the whole world, Sacred which was nameless and undifferentiated at the beginning of the journey, moving towards the end, becomes the concept of a single God, uniting in one word also all objects of the world. Cassirer emphasizes: "the beginning and the end are not similar: for from the sphere of simple uncertainty we have passed into the sphere of genuine community"<sup>256</sup>. If at the beginning of the path the Sacred was indefinite and nameless, but felt directly in its essence throughout the world, then at the end of the path the Sacred is indirectly present in the world through the awareness of the special functional ratio between the creator God and everything. Here we can trace how at the beginning of the path the Sacred in the form of mana was revealed to man directly along with the feeling, and at the end of the path the Creator God is an already formed concept.

It can be concluded that *mana* is the "god of the moment" emotionally affecting a person *before his objectification with a word*. It becomes Sacred objectified for society only when *mana* takes on the form of a word. The undifferentiated Sacred in the form of *mana* is an indefinite area that is not accessible to philosophical reflection. According to Cassirer, such a way of finding the Sacred bypassing the mediator in the form of a language, is looking for a mystic: "Mysticism of all times and peoples all the time seeks to solve this double spiritual problem: the task of comprehending the divine in its totality, in its highest specific depth and specific content, and at the same time remove each feature of the name and image. Mysticism is always directed at the world on the other side of the language, at the world of silence"<sup>257</sup>. Thus, based on the analysis of language, Sacred can

<sup>&</sup>lt;sup>256</sup> Ibid. P. 369.

<sup>&</sup>lt;sup>257</sup> Ibid. P. 369.

be represented as an interaction of undifferentiated, emotionally affecting a person, *mana* and language. Language in Cassirer's philosophy "transforms the indefinite into the definite and holds it in the sphere of finite definiteness"<sup>258</sup>.

The path of development of mythological and religious consciousness goes in parallel with language and moves from contemplation of individual impressions to the formation of concepts and classes of deities. We see a direct correlation between the formation of the Sacred phenomenon and the development of language (Table 2).

Table 2. Connection between myth and language

Comparison criterion	Myth		Myth – Religion	Religion – Scientific mindset
Stages of			Sym	bolic
language development	Mimic	Analogous	Qualifying	Classifying
Stages of development of Sacred	Mana	"Gods of the Moment" by Usener	"Special Gods" by Usener	God the Creator
Dominant type of perception	Emotional		Emotional and Objective	Objective

An important attribute of Sacred is its metaphoricity and ambiguity. Max Muller argued that mythology with necessity arises under the influence of the *disease* of the language. By the disease of the language, he meant the metaphoricity of the language, allegory, or, more broadly, the *ambiguity* of the language. Cassirer agrees with Müller's thesis: "Everything we call myth is conditioned and mediated by language; moreover, in the sense that it is associated with the main *disadvantage* of the language, with its original weakness. The language designation is always ambiguous in this ambiguity, in this "paronymy" of words, you should look for the source and origin of all myths"<sup>259</sup>. Without considering this property of the language, ancient religious and sacred texts were translated and understood literally, considering them a product of fiction, in no way

<sup>&</sup>lt;sup>258</sup> Ibid. P. 373.

<sup>&</sup>lt;sup>259</sup> Ibid. P. 328.

connected with reality. The myth was interpreted one-sidedly as fantasy, fiction and allegory. With the development of philology, additional meaning was found in the texts, which testified to the presence in the myth of a rather specific and complex system for describing the world. Here is an example of Cassirer considering the myth of Daphne, which is saved from the persecution of Apollo by mother Earth, who turned it into laurel. "Only the history of the language can make this myth 'understandable' give it a certain meaning. Who is Daphne? To answer this question, you need to turn to etymology or, in other words, study the history of this word. The name Daphne can be associated with the Sanskrit word *ahand*, and *ahana* means 'dawn' in Sanskrit. Once we know it, it's clear. The story of Phoebe and Daphne is nothing more than a description of the phenomenon we observe daily – first dawn appears in the east of the sky, then the sun rises and seeks to catch up with his bride, the bright dawn gradually pales under the action of the fiery rays of the sun and finally dies or disappears in the bosom of her mother, Eart"<sup>260</sup>. Here we see the act of identifying two very different sensory phenomena, this is the main thing in metaphor.

How and thanks to what does language acquire metaphoricity? A metaphor is a conscious transfer of the name of one representation to another representation similar to it. Cassirer is sure that metaphor is an integral and most important attribute of the Sacred: "the simplest mythological image arises only by virtue of transformation, through which the impression from the sphere of ordinary, everyday and profane rises to the rank of 'sacred' mythologically and religiously 'significant' " <sup>261</sup>. Comparing scientific knowledge with myth, it can be noted that concepts in scientific knowledge are formed only thanks to the generalizing principle (objective perception), and the scientific concept, thanks to this principle, as we said above, is expanding. This way of cognition originates in individual perception, which creates new ratios with other perceptions already in the *field of representations*, lining up in *series*. Here, the rational-discursive part of consciousness fully manifests itself, the result of which leads to the formation of

<sup>&</sup>lt;sup>260</sup> Ibid. P. 329.

<sup>&</sup>lt;sup>261</sup> Cassirer E. The Power of Metaphor // Metaphor Theory: Collection. M.: Progress, 1990. P. 36. (In Russian).

rod-like concepts. The internal content of perceptions is emasculated, the individual essence of objects is leveled. This type of perception is not given to a person from birth, it arises when the language reaches the third, symbolic stage of development. Objective perception is not able to give rise to a metaphor, concepts will be strictly unambiguous and profane, in which species and gender will occupy a hierarchically subordinate relationship to each other.

The emotional type of perception is able to explain the emergence of metaphor. As we have shown, it is primary to human consciousness. Through this type of perception, the concept is narrowed and concentrated to one point: "In this process, a certain entity, a certain extract, *is filtered out* (author's italics – *D.B.*), which is displayed in the 'value'. All light is concentrated at *one* point, in the focus of the value"<sup>262</sup>. Cassirer calls such points special points "concentrations of sensory experience and meaning". This explains the emergence of metaphorical judgment: in different phenomena, emotional perception distinguishes the same quality and levels all the different ones; there is an identification of sensory perceptions.

We have shown that thanks to this perception, an object is given one name corresponding to its main feature. All other specific differences are extinguished, since they are not distinguished by the language. Thanks to this endowment of the object with essence and the erasure of its other specific features, each part of it takes on the value of the main feature (whole). A single master selection is assigned to all parts that make up an object. Cassirer comes to an important conclusion: thanks to this perception, in the mythological consciousness, part is always equivalent to the whole. Cassirer concludes that any myth is built on the principle of "part is the whole" (pars pro toto). According to this principle, the part does not represent the whole, but *is essentially this whole*. This principle can be demonstrated in the example of magical cults, where there is an idea that if you take possession of any part of the enemy's body, then it is possible to literally own this enemy itself. The principle of "part is the whole" manifests itself in the Christian tradition in the form of special veneration of the relics of saints. In the Christian

<sup>&</sup>lt;sup>262</sup> Ibid. P. 37.

consciousness in the relics immanently present the saint himself and God himself. If we compare mythological consciousness with the scientific of the era of the New Age, in which the main type of perception is the subject, then we will see that in the scientific mindset the whole is the sum of elementary parts, in myth, on the contrary, even the most disparate fragments of the subject world retain knowledge about the whole world. The astrological mindset strikingly accurately reflects the principle of "part is the whole": in all things both spiritual and natural (part) there is a divine sample in the form of a planet or constellation (whole). The unity of micro- and macrocosmos, as well as the hermetic formula "what is above, then below" are also described by the principle of identity of part and whole introduced by Cassirer.

The myth establishes connections between sense data of consciousness *according to the type of experience of the identity of the essence of objects*<sup>263</sup>. As an example, Cassirer cites the Lithuanian theophoric god of cattle, whose name is Roaring (Baubis). The "god of the moment" in this case is an emotional experience in the form of a growl of cattle, which is subsequently found not only in the growl of the animal, but also in the roar of the storm, and even in the noise of the ocean. If the captured image of lightning is serpentine and winding, then he will become the "god of the moment" who will manifest himself when contemplating a snake. Based on the above, it becomes clear why in the Egyptian pantheon the sun god was portrayed with the head of a falcon: in the mythological consciousness, the sun "flies" across the sky like a bird.

E. Durkheim analyzed the social structure of the aborigines of Australia, on the example of which you can also demonstrate the process of forming concepts about the world. In Australian aborigines, the entire tribe is divided into two exogamous groups, which, in turn, are divided into subclasses. Each subclass of a tribe group is designated by its own totem animal or plant. The totem, denoting one or another class of representatives of the tribe, gradually includes objects of both spiritual and natural worlds. Thus, the whole universe is reduced to a totemic form of thinking: "The sun, the moon,

<sup>&</sup>lt;sup>263</sup> Bondarev D.E. "Sacred" and "Profane" in the Philosophy of E. Cassirer // Bulletin of the University of Tver. 2023. № 3(65). P. 137–153. (In Russian).

the stars are ordered and distributed in the same classes by which human individuals, members of the tribe, distinguish themselves. If, for example, the entire genus is divided into two main groups – Crocitch and Gamutch or Yungaro and Vootaro – then all other items belong to one of these groups. The alligators are Yungaro, the kangaroo is Wootaro, the sun is Yungaro, the moon is Wootaro, and the same applies to all known stars, trees and plants. Rain, thunder, lightning, clouds, hail, winter – they all have their own totem sign, on the basis of which they are entered into a certain genus"<sup>264</sup>. It is interesting to note that even the color of the representatives of the tribe is built into the totemic classification. For example, a red color belonging to different social groups has a different entity.

It is important to note that according to the initial social division, objects of the outside world are not just hung with some labels and signs, representatives of the tribe *really percept the identity of the essence of objects belonging to one genus*. Here we see how the social totem structure is transferred to the entire organization of the world. Initially, the subjective experience of the Sacred expressed to a person in the form of a "god of a moment" is embodied first in the image and name, and only then embodied in the material substrate of the – a totem animal or plant. The totem becomes sacred and universally significant for the entire team, which subsequently allows it to be endowed with the essence of all objects contemplated by the team.

According to the same principle, concepts are formed in the astrological mindset. The ancient Mexican Mayan people, in comparison with the natives, went beyond the planetary scale and also contained planets and stars in the spatial classification. In the myths of ancient Mexico, the formation of the concept is based on the law that originates in the movement of space objects: "Any division of things into classes goes back to the great heavenly model"<sup>265</sup>. After the spatial division of the contemplated world into sacred zones, the division of time can be observed. Different time periods both on the scale of one day and on the scale of one month, year, etc. are endowed with a special essence. The

 <sup>&</sup>lt;sup>264</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 284. (In Russian).
 <sup>265</sup> Ibid. P. 290.

sacred time order can correspond to both the whole life of the people and the life of an individual. The fate of man also has various time phases that are patronized by any planet: "power over human life gradually passes from the Moon, which dominates early childhood, to Mercury, from it to Venus, the Sun, Jupiter, until, finally, under the sign of Saturn, life comes to an end"<sup>266</sup>. In accordance with the planets in the astrological mindset, the inner world of man is subject to division, so there is an idea of various temperaments and characters that depend on the time and place of birth of a person.

We see that due to the emotional type of perception, concepts of a completely different type are formed in myth in relation to traditional generic concepts. Cassirer calls this way of forming concepts linguomythological (metaphorical). The emotional type of perception introduced by Cassirer explains the enormous importance of metaphor in the language an integral and main attribute of Sacred.

Cassirer's reflections and conclusions expand the meaning of the concept of Sacred which combines social (E. Durkheim) and phenomenological (R. Otto) aspects. Unlike Durkheim's concept, Cassirer believes that initially Sacred has an individual, not a collective nature. It is not the collective that endows the object with sacred qualities, but the individual. The first meeting of a person with the Sacred is subjective, but by assigning a name to the "god of moments" a person makes him objective and significant to other members of society.

The German philosopher recognizes the phenomenological nature of the Sacred his ability to instantly and directly "fascinate" consciousness, as the phenomenologist of religion R. Otto wrote about, but at the same time refuses his belief in the a priori origin of the sacred. Cassirer in his research confirms the fact that the irrational (emotional) factor is the primary and necessary condition for the emergence of the phenomenon of Sacred. But the Sacred is not something similar to the "thing-in-itself" it is the result of endowing the phenomenon of consciousness with a special semantic content. Cassirer deepens Otto's phenomenological analysis of the experience of the Sacred describing in

<sup>&</sup>lt;sup>266</sup> Ibid. P. 291-292.

detail the process of highlighting and naming the essence of the object, which is accompanied by a super-intense emotional experience.

The bidirectional structure of perception introduced by Cassirer allows us to explain the dichotomous division of the world into Sacred and Profane. The objective part of perception is responsible for the formation of generic concepts, in which a single thing is always part of an aggregate. The objective aspect of perception leads to a profane scientific mindset in which objects have no internal individual content. The emotional aspect of perception allows us to endow an object with an individual entity. Mythological consciousness is immersed in an object, perceiving it as a person, as having an internal dimension, a "soul". As a result of the work of the emotional aspect of perception, the concept is formed as a whole, capable of uniting heterogeneous objects according to the principle of entity identity. Due to this perception in myth, the part always coincides with the whole, and, as a result, the Sacred has at least two meanings: one meaning refers to the whole (to the essence), the second to the private (to the subject included in the totality).

Sacred in the concept of Cassirer is *a special concentration of meaning embodied in sensuality*. Sacred appears dialectical in the form of a ratio of opposite meanings: "With the transformation of animal horror into amazement – moving in two directions, mixed from opposite features, out of fear and hope, out of fear and admiration – as in this way sensual excitement first seeks a way out and *expression*, a person is on the verge of a new spirituality. It is this new spirituality of his that is displayed in a somewhat reflected form in the thought of the Sacred. For the sacred always appears *at the same time* remote and close, as familiar and protective, and at the same time as inaccessible, as 'mysterium tremendum' and 'mysterium fascinosum''<sup>267</sup>.

The existence of Sacred is due to the emotional perception of reality, which is primary and originally given to a person. This perception allows us to endow with special meaning and content, as well as give a name to the objects being contemplated. Sacred in Cassirer's philosophy is inextricably linked with the emergence of language and it is this

<sup>&</sup>lt;sup>267</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 93. (In Russian).

that determines the formation of symbols that perform the function that constitutes the world, it is the most important and the first impulse to the movement of the spirit, which creates a symbolic form.

Before proceeding to the analysis of the theoretical (scientific) form of cognition, consider the stages of development of the spirit in various symbolic forms. It is important for us not only to compare the mythological and scientific types of consciousness, but also to trace the transition from one symbolic form to another.

## **CHAPTER 3. MYTH AND SCIENTIFIC FORM OF COGNITION**

## **3.1.** Development of Scientific Knowledge

The scientific form of knowledge is not something unconditionally given to a person from birth. In order to the scientific mindset to take place and firmly establish itself in the human mind, it needs to go a long way of development. Initially, a myth was given to human consciousness, gradually transforming into religious consciousness, followed by a scientific mindset.

The variety of cultural forms in Cassirer's philosophy is due to the action of various acts of objectification produced by man. The principle of objectification is to elevate "individual to generally significant"<sup>268</sup>. The instrument of such an act in a broad sense is a *symbol*, which is not just a sign indicating something, but a special element constituting the world. The symbol in Cassirer's concept is "a set of phenomena in which the sensually given *is always filled with meaning* (author's italics – *D.B.*), where sensuality in its essence appears as a manifested and embodied meaning"<sup>269</sup>.

Cassirer for the study of the development of symbolic forms does not use the classical (for the era of modern times) subject-object relation proposed by Rene Descartes, but a different approach, where the reference point is a *function* that occupies an intermediate position between the subject and the object. Introducing the concept of function, Cassirer is sure that with its help he fills the gap between soul and body and solves the main metaphysical problem of philosophy, the problem of dualism of being and consciousness: "The primary basis in which the removal of opposites is sought is no longer God, as it was in occasionalism, in the philosophy of identity Spinoza or in the system of preset harmony of Leibniz. However, the *function* (author's italics – *D.B.*) performed by this fundamental principle remains unchanged: the empirically unconnected should reunite in it, 'coincidentia oppositorum' is accomplished in the sphere of absolute being"<sup>270</sup>.

<sup>&</sup>lt;sup>268</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 15. (In Russian).

 <sup>&</sup>lt;sup>269</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 81. (In Russian).
 <sup>270</sup> Ibid. P. 84.

In its development, the spirit, according to Cassirer, goes through three successive stages: the stage of expression, the stage of representation and the stage of designation, each of which has its own special transcendental (symbolic) function. Each of them is responsible for the construction of a particular worldview: expression, representation and designation functions. Due to these three functions that consciousness becomes available to contemplation of empirical reality, as well as the construction of the world of myth and religion, as well as the scientific mindset.

For our research, it is important to first point out the complexity of the study of the function, which, firstly, is that it is not given directly and directly to us for analysis: "We will never be able to directly contact this *function* itself, because it is given to us only in its results and disappears with them"<sup>271</sup>. Secondly, consciousness at each stage of the function cannot be described by the usual "developed" categories that have not yet been formed in consciousness, that is, consciousness must be analyzed *phenomenologically*, in a "natural attitude" (according to E. Husserl's theory). Thirdly, we cannot describe the origin of a function at one stage or another, we can only analyze what its action leads to: "But neither 'You' (emotional perception<sup>272</sup> – *D.B.*), neither 'It' (objective perception – *D.B.*) is derived logically, but in both cases, they are given to us directly in the original and specific way of seeing. It is pointless to wonder about the origin of such a vision – we can only make sure that it truly *exists* in itself. The task is not to bring it under any existing and accepted theory; rather, we need to understand how it itself makes pure 'theory' possible as such, with its reliance on and grasp of 'objective' determinations and facts"<sup>273</sup>.

Let's move on to the analysis of the stage of expression, where you can fully trace the work of the *symbol* – the unity of the sensual and the ideal.

**Expression stage.** Before we begin to talk about the function of expressiveness, it is necessary to determine what perception in Cassirer's philosophy is. According to Cassirer, *perception has a constitutive property*, it does not display the world, but, on the

<sup>&</sup>lt;sup>271</sup> Ibid. P. 103.

<sup>&</sup>lt;sup>272</sup> About bidirectional perception see section 2.3.

<sup>&</sup>lt;sup>273</sup> Ibid. P. 104.

contrary, is a gestalt image that "mints" sense data according to a predetermined scheme. Perception contains not only naked sensory sensations, but also unique semantic content. Cassirer defines perception as "a specially imprinted and independent semantic education"<sup>274</sup>. The initial act of expressiveness in its structure is dual and represents such a perception in which in a person's mind a phenomenon and essence, sensation and meaning, body and spirit, external and internal, physical and mental, thing and image are inextricably linked.

Cassirer considers this initial act of expressiveness to be a "primordial phenomenon" in the Goethean meaning, he is the first and original member of the series, according to which the spirit unfolds, forming a symbolic form. The expressiveness function manifests itself in the initial stages of the development of the myth, when the spirit is still "in the bud" in an anonymous and silent stage. Thanks to the work of the function in the mythological consciousness, there is still no division into "I" and "not-I" into a thinking subject and a conceivable, objective reality. Consciousness resides in the organic cosmos of myth and is inextricably fused with it. In mythological consciousness, the spirit is inextricably fused with nature given in sensations: "The rain spirit itself lives in every drop of water, it is tangible and bodily present in them"<sup>275</sup>.

The expressiveness function in the most complete form reflects the definition of the concept of a symbol in Cassirer's philosophy, since it is at the stage of expression that the sensual is inextricably linked with the meaning (meaning). Sensuality never appears before the mute consciousness, on the contrary, it is always filled with human expression, some high-intensity emotion with meaning<sup>276</sup>. Such a dual symbol structure at the expression stage still has a potential, not an actual status. At this stage, we cannot clearly separate sensuality and meaning, since the symbol holds them together and determines

<sup>&</sup>lt;sup>274</sup> Ibid. P. 58.

<sup>&</sup>lt;sup>275</sup> Ibid. P. 62.

<sup>&</sup>lt;sup>276</sup> According to Cassirer's concept, sensuality of any type can contain meaning. Cases of deaf-blind children, taught language through tactile alphabet, prove that not only sound allows the development of symbolic thought. The example of such children proves that the "world of meanings" is capable of being in any sensual material. Widely known in world culture are the example of the deaf-blind American writer Helen Keller (1880–1968). In the USSR, a successful case of teaching the language of four deaf-blind young men is widely known as part of an experiment conducted at the psychological faculty of Moscow State University, led by the Soviet philosopher E.V. Ilyenkov.

the presence of a person in unity with the living world. At this stage, the conceptual apparatus of thinking has not yet been formed, reality is not articulated and is a continuous stream of expressive experiences. The meaning of the contemplated reality is given to man directly and directly.

The myth most fully characterizes the stage of expression. At this stage, consciousness is not yet able to compare and compare an object with its image: "First of all, in it (in myth – D.B.) there is no reliable line between the perception of the 'represented' and the 'real' between desire and execution, between image and thing"<sup>277</sup>. Mythological consciousness is completely immersed in existence, in the state of "here and now". The identity of "image" and "thing" is expressed in the fact that any representation or fantasy is perceived by a person as reality. This fact is proved by ethnographic studies of Indian tribes that do not share the state of sleep and wakefulness<sup>278</sup>. There is no clear dividing line between sleep and wakefulness. What is familiar to the scientific worldview, namely: the separation of the "image" from the "thing", "abstract" or "conceivable" from the "real" or "present", mythological thinking is completely alien: "The 'image' does not represent the 'thing' – it is this thing; he not only replaces her, but also acts like her, so that he replaces her in her direct presence"<sup>279</sup>. This process can be seen most clearly in the magical function of the language, when "the name of the thing and the thing as such are inseparable from each other; an image or word

<sup>&</sup>lt;sup>277</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 50. (In Russian).

<sup>&</sup>lt;sup>278</sup> From 1977 to 2009, the American linguist Daniel Everett carried out a series of field expeditions to the Amazon, first as a Christian missionary, then as a linguist. He discovered a tribe of hunter-gatherers Pirah living on the banks of the Maisi River (a tributary of the Amazon), and lived in it for 7 years, studying their worldview and language. He failed to convert them to the Christian faith, since the Pirahas could only understand what was in their direct experience: firstly, they could not understand the idea of a transcendent God, whom no one "saw" and "heard" secondly, they did not know how to count to three, which made it impossible for them to understand the idea of a trinity. They considered sleep a continuation of the day, not having the ability to clearly differentiate them. Currently, many works on this topic have been published, the work is of particular interest (Koshelev A.D. On the Relativity of the "Exotic" Properties of the Language of the Piraha Indians and Their Principles of Perception of the World // Russian Journal of Cognitive Science. 2018. Vol. 5. № 1. P. 7–9. (In Russian); Burlak S. A. Piraha Language and Colloquial Speech // Russian Journal of Cognitive Science. 2018. Vol. 5. № 1. P. 22-26. (In Russian); Koshelev A.D. On the Influence of the Culture of Society on his Language (on the Example of the Amazonian Tribe Piraha) // Russian Journal of Cognitive Science. 2018. Vol. 5. № 1. P. 44-64. (In Russian)). Everett's analysis of the language of the Piraha tribe coincides strikingly precisely with the description of the structure of the language in Cassirer's concept. The tribe's language only developed to a second similar stage. The Pirah tribe had only direct perception, in their worldview and language there were no abstract and abstract concepts that did not have a directly perceived sensory component.

<sup>&</sup>lt;sup>279</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 53. (In Russian).

harbors a magical power that allows us to penetrate the essence of a thing"<sup>280</sup>. The language is in a mimic, mute stage and manifests itself at the level of gestures and expressive exclamations.

The expressiveness function determines the identical connection between the object and the subject, due to which a person is not able to separate and oppose himself to the world. It is important to emphasize that at this stage a person is in an expressive chaos of perceptions that do not have a connection with each other.

The symbols at the expression stage are schematically depicted in Figure 2.

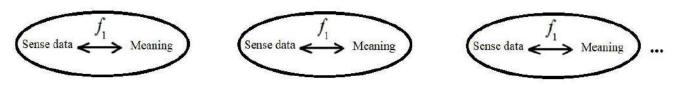


Figure 2. Symbols which do not have a connection with each other in the expression phase.  $f_1$  – expressivity function

The transition to the second stage is accompanied by the appearance of a clearly articulated language: "the word <...> forms the most important means of actualization of the concept, its separation from direct perception and contemplation. Let this separation seem to be the fall of knowledge, leading to the expulsion from paradise of the concrete and individual; it is with him that *the work* of the spirit that goes into infinity begins, in which he erects and forms his own world"<sup>281</sup>.

**Presentation stage**. When in mythological consciousness the continuous flow of expressive sensory experiences is interrupted, then *the function of representation* comes into play. Its task is to create "points" of certain values among a continuous stream – to select things with constant properties in space. The language moves from the mimic to the analogous stage. The new function connects individual expressive sounds and exclamations into words. As we showed above in the section on Sacred and Profane,

<sup>&</sup>lt;sup>280</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 25. (In Russian).

<sup>&</sup>lt;sup>281</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 267. (In Russian).

consciousness faced with reality "draws" it into itself and endows it with essence, "imprinting" its image. Cassirer calls such a process symbolic sealing. Symbolic imprinting is "a way of allowing perception as a 'sensory' experience to simultaneously include an unimaginable 'meaning' and leading it to an immediate concrete representation"<sup>282</sup>. Perception in this process, which gives sensuality additional meaning, is separated from its original sensual basis and forms a special world of "presentation". At this stage, a humanly formed language appears, and the subject is partially separated from sensual reality, a representation of the "I" isolated from the outside world appears. A person has a purposeful individual action, will and desire. "I" begins to oppose itself to the surrounding reality: "for a person grows to the consciousness of his "I" only in his spiritual *deals*<sup>283</sup>. In the act of endowing an object with a name, figurative thinking first manifests itself: "where the function of representation acts as such, where it manages to go beyond the present – the simple 'presence' of sensually contemplated content – where something is reproduced as the 'representation' of something else, where we come to a completely new and higher level of consciousness"<sup>284</sup>. Let's analyze in detail the development of consciousness at the stage of presentation.

Cassirer is sure that the process of representation cannot begin with the sense of smell, since it is closed on a dual pair of strong and intense experiences such as "attractive-repulsive", "sharp-soft", etc. A sense of smell to a small extent can indicate the spatial arrangement of an object, as well as highlight a specific olfactory impression as significant for others. Cassirer believes that "An important step forward in the rise from impressions to representations we observe when moving from smells to tactile sense"<sup>285</sup>. The process of representation begins with tactile sense, but here it goes only halfway, since, firstly, touch is limited by the body, which imposes restrictions on the process of highlighting the completeness of a given sensory variety, and secondly, the value merged with tactile sense does not become intersubjective: "The movement towards

<sup>284</sup> Ibid. P. 96-97.

<sup>&</sup>lt;sup>282</sup> Ibid. P. 159.

<sup>&</sup>lt;sup>283</sup> Ibid. P. 79.

<sup>&</sup>lt;sup>285</sup> Ibid. P. 109.

representation here (in the case of tactile sense – D.B.) is certain, but it is not fully realized: 'objective' content stays, so to speak, within its own boundaries, without becoming exactly 'different' without moving to an ideal *distance*<sup>286</sup>. The most active function of representation manifests itself through vision.

Color is the first property of contemplated reality that makes consciousness stand out. A person, in contact with an object, through *ideation* (according to Husserl's theory) concentrates close color shades of an object into one flat cumulative color and endows it with essence. Thanks to this process, the object becomes a stable point of constant value in the already interrupted stream of feelings: 'A constant object is assigned a constant color as a 'property' and all color phenomena have as their task only the representation of this property for us, serve as its signs. Therefore, we are distracted from the changeable lighting effects and see only the 'constant color' of the subject'<sup>287</sup>. It is important to note that at the next meeting of a person with an object that will have a close shade of a previously highlighted color, consciousness will "layer" a previously created color image on it during perception, leveling the differences and features of the object. Due to such homogeneity of color images, consciousness is able to group objects in an arbitrary way according to the identity of the contemplated color entities. Highlighting color as a property of contemplated reality is the first important step in the presentation process, here consciousness takes the first step towards building an objective mindset.

The next important step in the representation process is the allocation of a *space* category. Cassirer is sure that the construction of an objective mindset is impossible without determining the characteristics of things in space (forms and distances between them). Fixing an object in space allows the phenomenon to turn into a permanent and decorated thing: "The fact that this thing is exactly this thing and is preserved as such is achieved by us by pointing to its 'position' in the integrity of the contemplated space. In every moment we ascribe to it a certain place and connect the totality of these places into a contemplated unity, representing movement as a continuous and natural change"<sup>288</sup>. The

<sup>&</sup>lt;sup>286</sup> Ibid. P. 109.

<sup>&</sup>lt;sup>287</sup> Ibid. P. 114.

<sup>&</sup>lt;sup>288</sup> Ibid. P. 117.

category of space arises due to the fact that the presentation function *is added* to the expressive function, which appears as a new *ratio* between the perceptions produced at the expression stage. In other words, at first, at the stage of expression, consciousness endows *individual* spatial directions with divine or demonic entities due to the expressiveness function, and only then the presentation function builds new ratios between the formed expressive ratios: "The basic opposite of the Sacred and Profane is not just woven into all these spatial oppositions; they are constituted by it, created by it,"<sup>289</sup>.

Through breaks in the flow of sense data, representations carrying the spatial constancy of objects shine through. In these representation breaks, a sign is formed *indicating* the next break, giving the break a permanent status. Everything fluid, sensual and unallocated goes out. Consciousness focuses only on such fixed "value points" presentations with signs: "Space as a subject space is relied on and achieved only due to the fact that certain perceptions are given a representative value, that they are selected and distinguished as strong reference points for orientation"<sup>290</sup>. In other words, successive acts of presentation allow us to concentrate a homogeneous cast from reality and endow it with spatial signs, providing the consciousness with a constant ratio of successive representations (for example, some selected spatial profiles of an object). Such spatial signs are grouped in series, which allows the subject to be finally formed. Let's give an example. A house standing on the street is never sensually given to us from all facades, we create a holistic spatial concept of a house only when we go around it from all sides. Each sensory visual perception of the house will be interrupted, represented and replaced by a sign indicating the next perception, which, ultimately, will allow us to allocate the house as an object in space. At the same time, when we remember the specified house, we will have it only as a set of signs (representations), although it will seem to us that we really have the same perceptions as with his living vision.

<sup>&</sup>lt;sup>289</sup> Ibid. P. 123.

<sup>&</sup>lt;sup>290</sup> Ibid. P. 126.

It is important to note that the grouping of a sensory manifold can occur in different ways. This will depend on *the semantic center* in relation to which the group of signs will be organized. The formation of such centers by consciousness depends on the creative ability of the spirit<sup>291</sup>: "Even the starting point can shift, the method of attribution can change, and each time with such a change of phenomena, not only another abstract meaning is achieved, but also other specifically contemplated meaning and content"<sup>292</sup>. Nevertheless, the concept of space formed at this level belongs entirely to this reality. So far, it has nothing to do with the abstract homogeneous space that mathematics and physics operate on. The mythological space is completely permeated with expressive features, which allows it to be sacred.

*The time* category appears after the space is formed. Space creates substantive thinking in general, and time is "layered" on it: " 'the form' of time is expressed here as much as it is able to find support for itself in spatial and substantive definitions"<sup>293</sup>. Cassirer is sure that the process of separating a person from a given reality and the formation of a separate "I" goes in parallel with the development of the category of time: " 'I' discovers and knows myself only in a ternary form of temporary consciousness, and the three phases of time are connected together only in 'I' and thanks to 'I' "<sup>294</sup>. The category of time is not able to manifest itself at the stage of expression, since consciousness does not yet separate itself from the world, only when a formalized reality appears in front of a person in space, then in coordination with him the image of an integral "I". The construction of a separate "I" is accompanied by the appearance of will in a person.

Cassirer offers his original treatment of time. The characteristic of time is constituted by images that are not connected to each other, imprinted in memory, as in Bergson's philosophy<sup>295</sup>, *but by human's aspiration for the future*. The image captured at

<sup>&</sup>lt;sup>291</sup> For example, looking at a wire cube (Necker cube), we can perceive its orientation in space in different ways. This is due to the fact that our perception can shift such semantic centers.

<sup>&</sup>lt;sup>292</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 128. (In Russian).

<sup>&</sup>lt;sup>293</sup> Ibid. P. 132.

<sup>&</sup>lt;sup>294</sup> Ibid. P. 137.

<sup>&</sup>lt;sup>295</sup> Cassirer believes that the concept of time in the philosophy of A. Bergson describes more *biological*, nature-oriented than *historical*, human spirit-oriented time.

the moment contains a sign indicating the future, expected image. According to Cassirer, *consciousness is always directed to the future*, and this is due to the fact that the very essence of the spirit includes the ability to develop. Thus, time appears as a sequence, a series of representations connected due to the *ratio* (difference) between the present image and the expected (future). The past tense in Cassirer's concept is images of the future that have passed and corrected in the present. Awareness of them as past is made by changing their meanings, indicating time.

Based on the above, Cassirer makes a fundamental conclusion: at the stage of representation, the category of time "separates" a person away from this mythological reality, and thanks to this, a *religious* type of consciousness is formed. A sign indicating the future becomes intersubjective, which allows the formation of a religious *historical* time: " 'History' has only a willing and active creature that goes into the future and determines it by its will, *cognizing* history only because it constantly *produces* it. <...> The historical will itself is impossible without the activity of the 'productive capacity of imagination', but the latter becomes truly creative only where it is determined by the vital impulse of the will. Historical consciousness thereby rests on the interaction of the abilities of the act and the imagination; he requires the clarity and confidence with which 'I' is able to represent the image of a future being and direct his deeds to this image. Here we again discover all the strength and depth of the symbolic 'representation': *the symbol here, so to speak, drives reality, points its way and paves the way for it* (author's italics – *D.B.*)"<sup>296</sup>.

It is important to emphasize that the category of time formed by consciousness has nothing to do with the abstract time that physics operates on. At the stage of representation, time, firstly, is filled with expressive, sacred qualities, and secondly, it is still associated with sensuality.

At the presentation stage, the identity of man and the world is violated. A person has figurative thinking. Recall that at the stage of expression, perceptions were not connected to each other. The representation function at the presentation stage allows us

<sup>&</sup>lt;sup>296</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 144. (In Russian).

to combine individual perceptions and arrange them in a continuous series. The representation function in this case will express *the ratio* between two successive perceptions. A general diagram illustrating the coupling of perceptions via the representation function is presented in Figure 3.

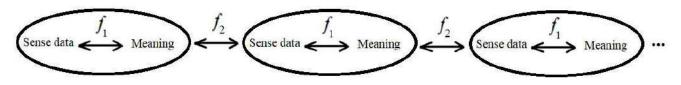


Figure 3. Connected symbols in the presentation phase.  $f_1$  – expressivity function,  $f_2$  – representation function

The presentation stage generally demonstrates the transition from a mythological to a religious type of consciousness. Opposition appears between dream and vigil. For example, in the sacred text of Zoroastrianism Avesta dream appears as an evil demon that fetters human activity. We see how vigil and dream are opposed to each other as good and evil. In Indian religion, the Upanishad text idealizes deep sleep without dreams. And the Christian tradition introduces a ban on excessive dreaming, dreams and interpretation of dreams.

The immanent spirit, fused with the present nature at the stage of expression, is transferred to a different, *transcendental*, beyond the senses, area. This stage of the development of consciousness can be described by referring to the plot of Abrahamic religions, in which the transcendent God gives a person a language (names of things). The myth of the expulsion of Adam and Eve from paradise, i.e. from a state of complete identity with nature and with God, illustrates this transition from the first expressive stage to the second – the stage of presentation. Cassirer believes that myth at the stage of expression is more consistent with animal "consciousness" than human, while truly human consciousness becomes only at the stage of presentation. Language gives the will of a person, thanks to which he is capable of independent activity and orientation in space. With the help of language, a description of the properties of things and their classification becomes available to the mind. It is important to add that at the language level, the presentation function allows not only to combine sounds into words, but also to form

grammatically integral sentences. The expressivity function remains at the presentation stage, but the intensity of its manifestation decreases. It allows us to endow the contemplated reality with sacred qualities and, using language, convey an additional wash of speech through musical shades.

When concepts about objects begin to form, then the next function is born – the *designation function*, which allows us to create symbolic systems in an abstract (purely symbolic) area.

**Designation stage.** When a stable image of reality is formed as a set of objects with inherent properties and space-time characteristics, then *a designation function* appears. After the mimic and analogous stages, the language goes into the stage at which the process of forming concepts of objects according to their properties fully begins. Consciousness is completely isolated from sensuality and now strives to form a ratio between meanings: "The view (at the stage of presentation – *D.B.*) was directed 'forward' to the reality of things, and not 'back' not to the thought itself and its own accomplishments"<sup>297</sup>.

To make it possible to contemplate reality at the stage of representation, consciousness reproduced images that were superimposed on the "matter" of feelings. It was aimed only at reality given through feelings. At the designation stage, a final break with the expressivity function occurs. Everything that was directly addressed to it ceases to be a stronghold for cognition. The thought now focuses on itself: "Cognition releases pure ratio from their intertwining with the concrete and individual 'reality' of things, to represent ratio as such in the universality of their 'form' in all their 'relativity' "<sup>298</sup>. The purpose of the designation function is to separate from the sensually given reality and build a world of theoretical form of cognition: "perception or contemplation is based on comparison or any other correlation of elements, but not on methods, not on the mode of their correlation. Only the logical concept rises to this mode, and only it makes such a

<sup>&</sup>lt;sup>297</sup> Ibid. P. 231.

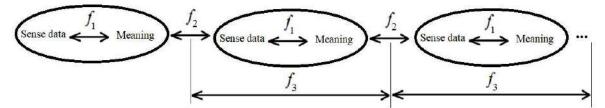
<sup>&</sup>lt;sup>298</sup> Ibid. P. 233.

revolution that as a result the "I" turns away from the objects in front of his gaze and turns to the way of their vision, to the characteristic of the gaze itself<sup>299</sup>.

Cassirer first introduced the concept of *function* in his early book, which we mentioned – "Cognition and Reality". In his main work "Philosophy of Symbolic Forms", he gave this concept a much more general meaning than was implied in said early book. He now understands this preliminary meaning of the concept of function as a special case of general meaning; in the third volume of his main work, Cassirer calls it *a designation function*. In "Cognition and Reality" the philosopher introduced the concept of "objects of the first order" i.e. objects that are sensually given to consciousness. In the "Philosophy of Symbolic Forms" these objects correspond to objects formed during the presentation stage. "Objects of the second order" in the early book were defined as objects defined by the type of *connection* between objects. In the "Philosophy of Symbolic Forms" are objects formed by the designation function. It is important to emphasize that the designation function determines *the ratio between the representations (signs) of the sense data of consciousness*, and are what are commonly called scientific concepts.

The designation function also allows us to arrange concepts in *series*. It should be noted that the series formed at the designation stage is not identical to the series formed at the presentation stage. They are similar only in structure, but perform different tasks. A series at the presentation stage represents a chain of connected sensory images, it sets a sign, a representation, the systems of which allow us to create a reality with sacred qualities with space, time and things and form a holistic "I". The function of designation is not directed to reality itself, but to the formed representations of objects and to their properties and differences that consciousness receives in a reflective mental act, which allows the formation of a theoretical form of cognition.

<sup>&</sup>lt;sup>299</sup> Ibid. P. 236.



A general scheme illustrating the designation function is shown in Figure 4.

Figure 4. A designation function that builds series using a ratio of ratios of symbols.  $f_1$  – expressivity function,  $f_2$  – representation function,  $f_3$  – designation function

At the designation stage, the language is deprived of all expressive and representative characteristics. Words formed at the presentation stage, as we have shown above, still had an association with the sensory image. At the last stage, the word is deprived of its visual and sensual image and is transformed into a pure sign: "the thought not only uses the signs offered to it (thinking -D.B.) in a ready-made language, but it itself, having acquired its new form, creates a commensurate form for signs. Purely 'conceptual signs' differ from the words of the language precisely in that they are no longer associated with any intuitive 'side meaning' that they no longer have a sensual coloring, an individual 'flavor'. From the means of 'expression' and contemplative 'presentation' they become pure carriers of meaning"<sup>300</sup>. At the stage of designation, the thinking subject is strictly separated and opposed to the object: "So, the categorical difference between the self and the non-self turns out to be a radical, constantly acting function of theoretical thinking, but the way this function is realized - how the contents of the 'subjective' and 'objective' being are separated from each other - changes depending on the achieved stage of cognition"<sup>301</sup>. The number is separated from sensuality and becomes a pure abstract symbol devoid of sacred meaning. The space permeated by sacred motifs and subjective feelings in myth becomes abstract and homogeneous. Then the space completely loses its visibility, curling up into signs: "Thus,

<sup>&</sup>lt;sup>300</sup> Ibid. P. 272.

<sup>&</sup>lt;sup>301</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 26. (In Russian).

here, too, their 'inner imaginary image' takes the place of an external cast from objects, their mathematical physical symbol, and the requirement that we place on the symbols of physics, is not that they reflect a single sensually detectable existence, and that they should be combined with each other like this, so that by virtue of this, by virtue of the sequence necessary in thinking, we can organize the totality of our experience into the system and master it"<sup>302</sup>.

Structures that were constructed at the presentation stage change their *meaning*. By the end of the presentation stage, the contemplated world becomes "mute" there are no more accents of "sacred-profane" and all knowable objects are devoid of sensual foundations. Sacred space is replaced by a homogeneous Descartes space with the motion of bodies according to Newton's laws. Historical sacred time is replaced by homogeneous abstract time, separated from the inner and outer worlds of man.

All three functions – expressions, representations and designations – are similar in structure, but have mutual opposition to each other. In order to free itself from the expressive continuous flow of feelings, the myth is invaded by the function of representation, manifested through language. Language always has its own shadow in the form of a sensual image and in order to get rid of it, the function of designation must exclude all sensual manifestations of language. If at the stage of presentation, the language had a metaphorical property (dual meaning), then at the stage of designation a strict and unambiguous connection is established between the sign and the value. The subject of knowledge is not sensually this subject and not its image, but *the ratio between the abstract signs*.

A conditional diagram illustrating the formation of a theoretical form of cognition is presented in Figure 5.

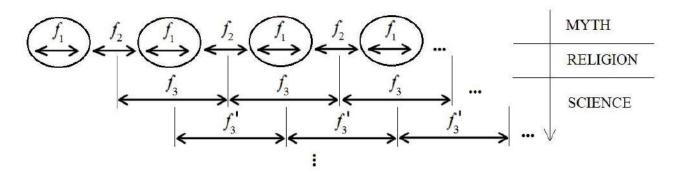


Figure 5. Formation of scientific knowledge. The arrow indicates the direction of movement of the spirit. A circle is a symbol: the unity of sense data and meaning.  $f_1$  – expressivity function,  $f_2$  – representation function,  $f_3$  – designation function

Table 3 presents the characteristics of the main stages of spirit's development.Table 3. Correlation between expression, representation and designation stages

Comparison	Expression Stage	Representation Stage	Designation Stage
criterion			
Symbolic function	Expressivity function	Representation function	Designation function
Symbolic form	Myth	Religion, culture	Science
The ratio of sensual	The unity of sensual	The division into	Pure meaning. Lack of
and ideal	and ideal	sensual and ideal	sensual
Stage of language	Mimic stage	Analogous stage	Symbolic stage
development			
Space Type	-	Space defined by sense	Mathematical Space
		data	
Theory	Immanence.	Immanence-	Transcendence.
characterizing this	Manifestationism.	Transcendence.	Creationism. Deism
stage	Pantheism	Panentheism	

Cassirer notes that the first scientific ideal in the history of mankind is Greek mathematics. And the founder of science in the modern sense of the word is Leibniz, in the system of which each thing is assigned a sign. A closed system of signs creates a world of ideas that are in harmony with the world of real things, as a result, Leibniz formed the ideal of absolutely unambiguous and mathematically accurate knowledge of the world – the ideal of absolute scientific theory, which he called Mathesis universalis. In such a theory, they have no idea of clarity, they exist only in a field of pure signs.

## **3.2.** Development of the Scientific Mindset

We described the evolution of the spirit going through various stages of its development<sup>303</sup>. At first, the man was in the organic space of myth, where the symbol manifested itself through the Sacred spilled throughout reality. We further showed how at the stage of presentation in the human mind the categories of contemplation are formed – space and time. Sacred concentrates into a word, but is still accompanied by a sensual image, a kind of "shadow" of the word. The representation function connects impressions in a series, forming their signs (representations), which allows consciousness to distinguish itself into a separate "I" from the world.

The description of the process of formation of the scientific concept in the "Philosophy of Symbolic Forms" is consonant with Cassirer's early studies, where he criticized Aristotelian metaphysics with its ontological justification of the concept. As we saw, in Cassirer's concept, the concept does not need its ontological justification, since the subject of the concept is the result of linking impressions by *a function* according to a certain law of following. The third and final stage of the development of the spirit and its ratios with the world was the designation stage, the specific function of which made it possible to form scientific concepts. The subject formed at the previous stage in a sensually given reality, moving to the designation stage, remained, but lost all its visual sensory characteristics and "folded" into a pure sign form.

The designation stage in itself does not yet set the scientific mindset. In order to create it, the designation function must travel back. From the abstract sphere it has to return to the sensual world to be approved as scientific worldview and to create the technics: "The elements from which natural reality is built for us, the reality of the

<sup>&</sup>lt;sup>303</sup> Bondarev D.E. The Role of the "Symbolic Function" in the Formation of the Scientific Mindset in the Philosophy of E. Cassirer // Nauchnoe mnenie. 2024. № 6. P. 30–38. (In Russian).

physical world of objects, do not need to be captured by *direct* perception, but still it must at least *indirectly* be verified by some data of experience"<sup>304</sup>.

How does scientific knowledge formed at the designation stage relate to sensuality? The designation function, which has retired into the sphere of pure signs, must return to the sensory world in order *to replace the order that was originally formed in the myth with another order*: "The starting point is empirically 'given' multiplicity, but the purpose of theoretical formation of concepts is to turn it into rationally observable and 'constitutive' multiplicity. Such a transformation is never completely completed: every time it begins anew using increasingly complex means. The fundamental theoretical and cognitive question of the possibility of 'applying' mathematical concepts to nature ultimately goes back to this circumstance and to the problem contained in it. The difficulty of similar application is that it seems possible only on the basis of conscious metaβaσις εις άλλο γένος<sup>305</sup>, phenomena are, as it were, forcibly included in *a different type of order* than the one to which they previously belonged"<sup>306</sup>.

It is important to emphasize the bidirectional<sup>307</sup> nature of this function. At the stage of presentation, the function acted towards the subject, the order of the phenomena lining up in a series was completely dictated by the "natural" symbol – the Sacred one, developed at the stage of expression. The creation of a scientific mindset, on the contrary, is accompanied by the reverse movement of the function, it is aimed at the contemplated world in order to "*forcibly*" *build a chain of sensual phenomena in series*. In other words, if in myth the phenomena themselves, filled with expressive characteristics, predetermined the nature of the series to which they turned out to be subordinate, then in the scientific worldview, on the contrary, *the series forces the phenomena to follow each other according to the order created in the ideal sphere*. The designation function, which has formed scientific concepts in the ideal sphere, returns to the world of sensual data in order to replace the intermediate members of a number with their *limit* values: "you can

<sup>&</sup>lt;sup>304</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 296. (In Russian).

<sup>&</sup>lt;sup>305</sup> Transition to another genus (*Greek*).

<sup>&</sup>lt;sup>306</sup> Ibid. P. 326.

<sup>&</sup>lt;sup>307</sup> See section 2.3.

trace some series of 'given' whose extension leads precisely to those moments that were established by the purely constructive work of thought as the foundation of certainty in general. This relationship is made possible by the fact that in place of the unit 'values of the series' established by observation or empirical measurement, we put the limit values to which the series as a whole move"<sup>308</sup>. Such a process is accompanied by the fact that a person, contemplating the objects of the sensual world, perceives them as ideal objects. For example, an astronomer, looking at stars and planets, sensually perceives them as material points moving in ideal elliptical orbits in three-dimensional homogeneous outer space: "Not a single physical 'law' can be strictly expressed and substantiated without the process of such substitution. 'Classical' natural science theories everywhere give us examples of this method of 'going to the limit'. Suffice it to mention the concepts of 'fixed body', 'ideal gas', 'incompressible fluid', 'perfect circular process' and the like as examples of the prevailing method in them"<sup>309</sup>. The function that orders phenomena according to scientific order is not able to endow them with expressive qualities. The objects of the contemplated world in the scientific mindset lose spiritual depth, the inner spiritual dimension. The worldview becomes completely profane and mechanistic.

A schematic diagram illustrating the formation of a scientific mindset is presented in Figure 6. It is important to note that the representation function  $f_2$ , which served as the basis for the formation of the notation function  $f_3$  (Figure 5), is replaced by the *modified* representation function  $f'_2$ .

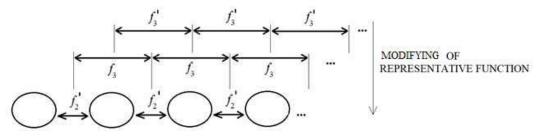


Figure 6. Shaping the scientific mindset. The arrow indicates the direction of movement of the spirit. An empty circle indicates the absence of an expression function.  $f'_2 - modified$  representation function,  $f_3 -$  designation function

 <sup>&</sup>lt;sup>308</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition. P. 338–339. (In Russian).
 <sup>309</sup> Ibid. P. 339.

## 3.3. Comparison of Myth and Scientific Mindset

In conclusion, we are going to make a comparative analysis of the myth and the scientific mindset – the two main symbolic forms in Cassirer's philosophy.

Cassirer's philosophy convincingly proves that any mindset is formed through acts of objectification, "translation of simple 'impressions' into internally defined and structured 'representations' "<sup>310</sup>. For our investigation it is very important to trace the process of objectification, how and according to what laws it occurs. Starting with sensory direct impressions, then turning into spatial or other representations, thinking acquires constants – their *ratio*, which, repeating and complicating, construct one or another form of thinking. These constant ratios of our experience, as they accumulate and "strengthen" provide a solid basis for becoming an objective mindset. The objectivity of the world is never given initially to human consciousness, it is always the result of its cognitive acts: "Thus, the objectivity of this mindset is nothing more than an expression of its complete isolation, an expression of the fact that we in every particular element and with it think of the form of the whole and thereby consider the particular only as a kind of special expression, as a 'representative' of this general form"<sup>311</sup>. It follows that the myth is as objective as the scientific mindset. What is their fundamental difference?

Scientific theoretical knowledge is built on the discontinuity of sensory experience. The unspecified and unstructured experience of direct impressions of existence is not able to give rise to a theoretical form of knowledge. In order to scientific knowledge becomes possible, the flow of our sensory experience must be stopped, transferred to the domain of representations and correlated with another image representation: "Associating a view with a subject' ultimately means nothing more and is essentially nothing more than this very inclusion of a view in a systematic relationship of a higher order, in which it is destined for a uniquely defined place"<sup>312</sup>. The basic elements of scientific thinking are two processes – this is the connection and separation of sensory experience: "The difference between this (scientific – D.B.) world and the world of sense data is not in the

<sup>&</sup>lt;sup>310</sup>Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 43. (In Russian).

<sup>&</sup>lt;sup>311</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 46. (In Russian).

<sup>&</sup>lt;sup>312</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. P. 46. (In Russian).

matter from which it is erected, but in the new order that it follows"<sup>313</sup>. The superstructure over sensory experience, which performs the function of correlating the imaginary with the real, breaking and connecting the stream of sense data, is gradually complicated by the addition of causal connections. Due to the appearance of such breaks in sensory experience, causal relationships are formed. Due to the fact that images stored in memory are endowed with signs where one is the cause and the second is the consequence. This allows us to connect two images with an *unambiguous, imaginary* type of *connection*. Theoretical scientific knowledge achieves its development the more it shortens the duration of sensory experience: 'the general *concept* of objectivity, as well as its individual concrete implementations, as they are formed in the field of theoretical thinking, are completely based on progressive acts of *cutting off* elements of experience, on critical work of the spirit, which more and more realizes the contrast of 'incident' and 'essential' changeable and unchanged, random and necessary"<sup>314</sup>.

The myth lacks the function of comparing the time of the previous and subsequent events. This forms a completely different from scientific – mythological type of causality. This is not to say that the myth does not know about causal relationships, mythological cosmogonies and myths about the creation of the world suggest otherwise. In the scientific mindset, any process is decomposed into separate states that exist at various intervals of *abstract*, and not subjectively experienced, time. In myth, it is impossible to determine the cause and deduce the consequence from it: "The mythical concept of causality is not akin to temporal continuity (Kontinuität), but to the spatial neighborhood (Kontiguität)"<sup>315</sup>. In the magical mindset, mythological causality is based on a person's belief that the proximity of objects in space means their unity in involvement in mysterious divine forces: "What once came into contact has forever grown together in magical unity. Simple compatibility always has real consequences"<sup>316</sup>. For example, in the astrological mindset, the spatial configuration of the celestial world determines the

<sup>&</sup>lt;sup>313</sup> Ibid. P. 47.

<sup>&</sup>lt;sup>314</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 49. (In Russian).

 <sup>&</sup>lt;sup>315</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 302. (In Russian).
 <sup>316</sup> Ibid. P. 302.

configuration of objects, qualities, physical and mental properties belonging to the earthly world.

As an example, consider the causal principle underlying scientific cognition. Suppose that some kind of event A occurred, fixed by a sense data. Then, in the representation region, this event is decomposed into individual moments  $t_1$ ,  $t_2$ ,  $t_3$  and their corresponding states  $A_1$ ,  $A_2$ ,  $A_3$ . The disintegration of event A into separate processes that takes place already in the sphere of consciousness makes it possible to build a causal relationship, i.e. explain how and for what reason  $A_1$  goes to  $A_2$ , etc. Any physical experiment demonstrates this causal principle well. For example, the falling apple and the movement of the planets obey general laws, while each event is indicated by quantitative characteristics: "The connection between 'cause' with 'effect' <...> in direct sensory perception is not given to us – it is an original 'complement' of thinking ability, spiritual *interpretation* of sensory phenomena. If this connection, not given to us in contemplation, is still correlated with contemplation, and sensory content as such appears to be the carrier of a form of causality, then sensory content cannot do without ideal mediation. The concept of cause and effect should be 'schematized' in contemplation, it should create for itself a spatial or temporal correlate and image"<sup>317</sup>. This process of mediation can also be traced very clearly in an experiment demonstrating a change in the plane of swing of the pendulum, carried out in 1851 by Jean Foucault. The French physicist, with the help of his pendulum, proved the rotational-daily motion of the Earth around its axis. If a scientist looks at the course of this experiment from the inside of scientific consciousness, he correlates its results with a chain of causal relationships that will allow him to make a judgment about the connection of this phenomenon with the rotation of the Earth. In mythological consciousness, such a logical sequence of reasoning is absent, and a swinging pendulum are not proof of the fact of the rotation of the earth.

Myth has its own type of causality. Mythological causality suggests that cause and effect are connected not with the help of reason, but with the help of sense data to the consciousness of objects. Myth creates not abstract logical connections between events

<sup>&</sup>lt;sup>317</sup> Ibid. P. 300–301.

and objects, but relationships directly related to being and action. For example, for many archaic peoples there is an idea that the phenomenon of animals at a certain time of year is the reason for the appearance of this time of year. So the swallow flying in the sky and preceding the new season does not indicate its approach, *it literally creates the coming summer*. Mythological thinking connects cause and effect through sensually given existence. If scientific causality describes single events using a general law operating in an ideal homogeneous space and in time, then mythological causality, on the contrary, based on a single individual and unique event, derives an universal law.

Such mythological causality, Cassirer believes, is closely related to the principle of "part is the whole". For scientific knowledge, the whole is not just the sum of its parts, which have unambiguous functional relationships with each other. The whole ceases to be whole if the parts have ceased to have such connections. For example, a water molecule is a strict ratio of two hydrogen atoms and one oxygen atom. By removing one atom or breaking the atomic bond, the whole in the form of a water molecule will cease to exist. In mythological thinking, the part always remains whole even with a great distance of objects from each other. If a representative of any tribe got any part of the enemy, be it saliva, part of the body, name, etc., then he literally owns this enemy. Conspiracies and sentences carried out by witches and sorcerers can use hair alone to inflict damage. The spell in the myth has neither spatial nor temporal boundaries. It can act from a distance and can affect the past, present and future: "The logical-causal analysis of the event is largely aimed at ultimately decomposing this into simple processes that we are able to observe by ourselves and in the regularity of their course – the mythological view, on the contrary, even turning to the consideration of a procedural event, where it raises the question of occurrence, connects the 'genesis' itself with a specific given existence"<sup>318</sup>.

In myth, in every smallest part of the world, you can find the whole. The whole in science appears as the sum of elementary processes. The mathematical concept of the integral describes well the principle of cognition in scientific thinking: the integral is an infinite sum of infinitesimal terms. In myth, exactly the opposite is true: a totemic

<sup>&</sup>lt;sup>318</sup> Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. P. 67. (In Russian).

structure can be found in any manifestation of being. In the Zunya people, even parts of the animal cut after hunting are subject to totem classification. In the same way, the ideas of the unity of macrocosm and microcosm appear in astrology: the celestial structure finds itself even in the smallest element of being: "Compared to the ideal of the mathematical concepts of law and organic form, the mythical-realistic view is forced to trace the same scheme through all reality, the same *image* of being"<sup>319</sup>.

The scientific worldview is a closed system of differentiated heterogeneous and distinct elements of experience connected by an imaginary type of connection. Ideal bonds towering over units of experience enter into relationships with other similar bonds, forming higher-order bonds. The scientific worldview, thus rising in the hierarchy of laws, systematizes and classifies the laws of the lower order, striving to find a single law or theory. Myth, on the one hand, has a structure similar to science. In myth, deities are subject to hierarchization, rising from lower-level deities to a single initial. On the other hand, the myth "fastens" its own objects not with ideal connections, but with connections of the identity of entities found in specific sense data.

The starting material for the *properties* of objects in myth are elements of direct experience. Form, effect, color – each of these properties of matter in myth can have essential content. In science, a property is something abstract, relative, "divorced" from direct perception. As an example, one can compare how the properties of substances in alchemy and chemistry are determined. In alchemy, each state of matter, such as fluidity, immobility, inconstancy, corresponds to a certain *essence*, a living creature. Lavoisier, known as a reformer and creator of modern chemistry, attributes properties of a completely different kind to substances. He considers the properties of elements in modern chemistry to be something derivative, ideal and conceivable. For example, the combustibility of a substance no longer indicates the presence of a special entity in it in the form of phlogiston, as in alchemy, but is a *connection* of a substance with oxygen. Thus, we see that combustibility as a property passes from its *ontological* base (fiery substance in the form of phlogiston) to *functional* (relationship with oxygen).

<sup>&</sup>lt;sup>319</sup> Cassirer E. Conceptual form in mythical thinking // Cassirer E. Favorites: Individual and Space. P. 299. (In Russian).

The space of myth and the space of science are qualitatively completely different. Ethnographic studies of the worldview of "primitive" archaic ethnic groups indicate that ancient man had a phenomenal memory and was able to perfectly remember the space around him in the smallest detail. But he was not able to depict the terrain in the form of a conditional map in the diagram. This proves that the conceivable homogeneous space to which we are accustomed is not given to man from birth. Infinity, continuity, homogeneity are attributes inherent in mathematical homogeneous and isotropic space. Mythological space is inhomogeneous and anisotropic in contrast to Euclidean space. As an example of the confrontation of these spatial forms, one can cite, on the one hand, the modern scientific orientation of a person in space by defining the cardinal points "northsouth-west-east" and, on the other hand, the distribution of space into special sacred zones, which correspond to both natural elements and activities, professions and classes of people, in the worldview of the Indian people of Zunya, which we talked about above. The directions of geographical orientations for a representative of the archaic people cannot be qualitatively the same. Each side of the world has its own color and element. Peoples inhabiting different parts of the world are different in their field of activity: warriors live in the north, their element is air, hunters in the west, their element is water. In science, metric space is invariant: right and left, top and bottom do not depend on the reference point. According to the scientific mindset at any point on the planet the properties of a space (top-bottom, left-right, etc.) remain constant.

Table 4 shows the comparison of myth and the scientific mindset.

Comparison criterion	Mythological consciousness	Scientific consciousness
Reality is determined by	Subject's sense data and actions	Measurability
The ratio of the part and whole	The part is whole	Whole is the sum of the parts
Image – thing pair	Unity of image and thing	Image and thing are divided
Properties of objects	Sensual, substantial	Ideal, functional
Method of formation of	Linguomiphological	Logical-discursive
concepts	(metaphorical)	

 Table 4. Comparison of myth and scientific mindset

Comparison criterion	Mythological consciousness	Scientific consciousness
Type of connection between	A connection formed by the	An ideal, imaginary type of
elements of consciousness	type of identity of objects	connection based on causal
		relationships
Sacred – Profane pair	Worlview is sacred	Worldview is profane
Space	Heterogeneous, anisotropic,	Homogeneous, isotropic,
	sacral	abstract
Time	Correlates with internal	Isolated from the inner world
	experiences and external	and external objects,
	objects, heterogeneous,	homogeneous, quantitative
	qualitative, sacred	
Number	Expresses quality and quantity,	Expresses quantity
	sacred	

## CONCLUSIONS

"Philosophy of Symbolical Forms" is an original philosophical system which proves that the scientific mindset which strongly approved itself during an era of Modern times is one of many worldviews. Theoretical scientific knowledge is not given to the person from birth, and is the result of a difficult way which has to pass human's spirit. Passing through each stage of the development, the spirit creates symbolical forms which are irreducible to each other and have various constitutive principles.

The Cassirer's system suggests the unique philosophical theory by means of which it becomes possible to describe the relation of consciousness and the material world. It allows us to overcome the metaphysical opposition of spirit and matter. In the center of Cassirer's philosophy is a concept of function which sets the difficult act of consciousness creating any symbolical form due to which closed and integral semantic "universe" of culture appears at consciousness. The symbolical function is not neither transcendental, nor immanent, it represents "unity of immanent and transcendental".

In Chapter 1 prerequisites of the formation of the philosophy of the culture of E. Cassirer are described. Sources of emergence of neo–Kantian school of thought are shown. Cassirer follows Kant that the cognizable objects are designed by the subject, but refuses unconditional support on sense data. In Cassirer's philosophy, sense data are generated by consciousness, thanks to its creative activity. Kant considered that knowledge has to rely entirely on mathematical natural sciences, that is any research of a subject has to use mathematical laws. But Cassirer's philosophy researches all possible worldviews such as myth, religion, art, language, etc.

It is shown that the average (culture philosophy), and late (anthropological) stages of Cassirer's philosophy was the main his early book "Cognition and Reality". In it the concepts of a series and function which are form-building not only in natural sciences, but also and in sciences of culture were entered. The analysis of the "Logic of Cultural Sciences" of a late (anthropological) stage of Cassirer's philosophy allowed us to define the concept of a form, which was the main concept of "Philosophy of Symbolical Forms". Cassirer understands the concept of form in Aristotelean sense as the dynamic system of concepts about the world, including a concept of the purpose – the teleologic principle.

In Chapter 1 Platon, Goethe, Hegel, H. Cohen and E. Gusserl's influence on the formation of the philosophy of E. Cassirer was illustrated. Platon development the dialectic principle of thinking in dialogue Parmenid put in the forefront of his philosophy the category of the ratio (difference) which Cassirer embodied in a concept of function. Goethe influenced Cassirer in several aspects. First of all, Cassirer uses the Goethe's "primordial phenomenon" and interprets it as the symbol which was shown at the first stage of the development of consciousness - an expression stage. The Goethe's "primordial phenomenon" in Cassirer's philosophy is language at an initial (mimic) stage of development. "Primordial phenomenon" is the first and initial member of a series according to which the spirit, forming a symbolical form is developed. Cassirer's idea to transfer the concepts of a series and function from natural sciences to humanities was inspired by Goethe because he compared "an art form" (Kunstgestalt) and "a form of the nature" (Naturform). Hegel influenced Cassirer in two aspects. First, that it is necessary to bring partial forms of manifestation of the spirit out of its integrity, out of his understanding as a concrete "whole". Secondly, it is necessary to consider the spirit in evolutionary temporary unity, that is without separation from the beginning and the middle of development. Hermann Cohen influenced Cassirer eliminating Kant's "thingin-itself" and distinction of sensuality and mind. Space and time in Cassirer's theory, also, as well as in Cohen's system, are categories. Also, like Hermann Cohen, in the philosophy of Cassirer, being is based on act of thinking, which itself reproduces cognizable objects. Cassirer's philosophical system was also influenced by the early stage of Husserl's work related to his work "The Philosophy of Arithmetic" where the founder of phenomenology concluded that due to a number of natural numbers, consciousness is able to combine its phenomena in aggregate and form concepts. Husserl raised the question of the possibility of the existence of other mathematical series capable of combining cultural objects in aggregate. Our opinion is that on this Husserl's question Cassirer answers in the

The first chapter also describes the purpose and method of Cassirer's main philosophical work "Philosophy of Symbolic Forms". Definitions of the main concepts of series, function, symbolic form and symbol are given. The interpretation of the idea of

"Philosophy of Symbolic Forms".

symbolic forms in Cassirer's later works is also considered, primarily in the book "An Essay on Man". The German philosopher calls the man an *animal symbolicum* – a symbolic animal because of its ability to symbolize reality. Cassirer introduced the concept of a symbol only in the middle stage of his work, when the main goal for him was to develop a philosophy of culture, in later years he gives a biological justification for this term, based on the results obtained by the German biologist Jacob Ikskül.

The first chapter shows how Cassirer justifies the need for an intersubjective understanding of consciousness. In his concept, consciousness is not individual and independent as it is in Kant's philosophy, but it is a universal collective consciousness. The philosopher considers the nature of man as functional, not substantial.

The second chapter describes the connection between myth and language. An analysis of the first volume of the "Philosophy of Symbolic Forms", entitled "Language", concluded that the German linguist W. Humboldt had a strong influence on Cassirer. According to Cassirer, Humbold's studying language strictly followed the critical method of Kant. Humboldt, according to Cassirer, correctly believed that language must be studied in close relationship with the worldview of the people who are its bearer, Humbolt's idea that language has a priori status is also important. It does not reflect, but constructs the diversity of the world. Cassirer writes that the language goes through three stages of its development. Cassirer calls the first stage mimic. At this stage, the sense data and its meaning are given to consciousness in direct unity. This stage is the main, it determines the fate of the development of a particular language. The next stage is called analogous, in which the language is freed from sensuality. Consciousness is no longer revealed in itself the content of the impression, its image is formed in the field of representations. At this stage, a mediating relationship appears between the sound and its meaning, which allows us to arrange the meanings in a series. The third stage is called the symbolic (or designation stage). At this stage, the meaning is already separated not only from the sound, but also from the image, and moves in the abstract field of signs.

The Cassirer's theory of a language leads to the conclusion that a language has an individualizing function, distinguishes individual impressions and assigns them meanings that become properties of objects (it means that it is impossible to attribute properties to them outside the language). In addition, language groups group impressions are not only according to based on the principle of common external features, but also by referring to on complex mythological motives. Finally, concepts are formed not only from contemplation of objects of the world, but also from the inner world of the subject through volitional acts of action.

Analysis of the second volume – "Myth" – leads to the conclusion that for Cassirer myth is not a product of fantasy or subjective representation, it is not a poetic or philosophical fiction. Cassirer considers myth as a special kind of reality. The bidirectional nature of perception was described, which makes it possible to naturally explain the dichotomous division of the world into Sacred and Profane. The formation of the dual concept of perception was influenced by one of Cassirer's teachers, neo-Kantian P. Natorp. Cassirer considers perception as dual, with two directions: "plus" (objective perception) and "minus" (emotional perception). "Plus" denotes the direction of consciousness to the object. Objects in this case are known on the basis of common features as the "world of things". On this path, consciousness isolates common features in objects and forms common classes. Thanks to this logical-discursive way of forming concepts, species and genera are formed. "Minus" means the direction to the subject from the object. Objects in this case are known as a special "world of personalities" that affects a person. The world in this case appears as "equal to us" and consciousness reacts to it through feelings-emotions. In the process of such perception, a person endows an individual entity with an object that affects him.

Two aspects of perception are present in a person at the same time, and this is true for any symbolic form; in each of them, the ratio of the two forms of perception is different. In mythological consciousness, the emotional part of perception prevails over the subject, in religious consciousness, on the contrary, the objective perception prevails over the emotional. In the scientific mindset, starting from the era of the New Age, the emotional aspect of perception is minimized, the substantive (discursive) part of perception is most manifested.

The different balance of the subject and emotional parts of perception is associated with different forms of the relationship between myth and language, to clarify this relationship, Cassirer turns to the works of the German philologist G. Usener. Initially, a person is given the emotional aspect of perception, thanks to which he is able to give names to objects. The objective perception is developed in the second, and is finally formed only in the third, symbolic stage of language development. The genesis of the mythological and religious components of consciousness goes in parallel with the development of language and moves from the contemplation of individual impressions to the formation of concepts and classes of deities.

An analysis of the first ("Language") and second ("Myth") volumes of the "Philosophy of Symbolic Forms" concluded that Cassirer's symbol theory significantly expands the concept of Sacred combining sociological (E. Durkheim) and phenomenological (R. Otto) aspects. As a result of a comparison of Cassirer's studies in the field of language and myth, it was concluded that the Sacred was originally individual, and not collective. Sacred in Cassirer's philosophy is a symbol that is the initial impulse which contributes to the construction of a symbolic form.

The third chapter describes the process of forming a scientific mindset and compares the mythological and scientific worldviews. In its development, the spirit, according to Cassirer, goes through three stages: the stage of expression, the stage of representation and the stage of designation, each of which has its own special function: expressions, representations and designations. Due to these three functions that consciousness becomes available to contemplation of empirical reality, as well as the construction of the world of culture and the scientific mindset.

At the stage of expression in a person's mind, a phenomenon and essence, sensation and meaning, body and spirit, external and internal, physical and mental, thing and image are inextricably linked. This stage is characterized by a mythological type of consciousness, in which, thanks to the work of the function of expression in mind, there is no division into "I" and "non-I". The expressiveness function in the most complete form reflects the definition of the concept of a symbol in Cassirer's philosophy, since it is at the stage of expression that the sensual is inextricably linked with the meaning. At this stage, the "thing" and its "image" coincide. The language is in a mimic, mute stage and manifests itself at the level of gestures and expressive exclamations. The expressiveness function determines the identical connection between the object and the subject, due to which a person is not able to separate and oppose himself to the world.

At the second stage, a presentation function is added that organizes the characters in a series. The language moves from the mimic to the analogous stage. A humanly shaped language appears, and the subject is partially separated from sensual reality. At this stage, categories such as space and time are formed. The category of space arises due to the fact that a presentation function is added to the expressive function, which sets new relationships between the perceptions produced at the expression stage. The concept of space formed at this level belongs entirely to this reality. The time category appears after the space is formed. The process of separating a person from a given reality and the formation of a separated "I" goes in parallel with the development of the category of time. The characteristic of time is constituted by a person's aspiration for the future. According to Cassirer, consciousness is always directed to the future, and this is due to the fact that the essence of the spirit includes the ability to develop. At the stage of representation, the category of time "separates" a person from mythological reality, and thanks to this, a religious type of consciousness is formed. The sign indicating the future becomes intersubjective, which allows the formation of religious historical time. The presentation stage generally demonstrates the transition from a mythological to a religious type of consciousness. With the help of language, a description of the properties of things and their classification becomes available to the mind. A series at the presentation stage represents a chain of connected sensory images, it sets a sign, a representation, the systems of which allow us to create a reality with sacred qualities with space, time and things.

At the third designation stage, consciousness is completely isolated from sensuality and forms ratios between meanings. Language transition to the designation stage. At this stage, concepts are formed. The designation function determines the relationship between the representations (signs) of the sense data of consciousness, i.e. it is not directed to reality itself, but to the formed representations of objects and their properties obtained by consciousness in a reflective mental act that determines the theoretical form of cognition. The number is separated from sensuality and becomes a pure abstract symbol devoid of sacred meaning. The space permeated by sacred motifs and subjective feelings in myth becomes abstract and homogeneous. By the end of the presentation stage, the contemplated world becomes "mute", there are no more accents of Sacred and Profane and all cognizable objects are devoid of sensual foundations. Sacred space is replaced by a homogeneous Descart's space with the motion of bodies according to Newton's laws. Historical sacred time is replaced by a homogeneous abstract time that has no direct connections with either the human inner world or the outside world. A theoretical form of cognition is formed.

It is shown how the scientific mindset arises. To do this, the designation function, which has replaced into the sphere of pure signs, must return to the sensual world in order to replace the order that was originally formed in the myth. At the stage of presentation, the function acted towards the subject, the order of the phenomena lining up in a series was completely dictated by the "natural" symbol – the Sacred one, developed at the stage of expression. The creation of a scientific mindset, on the contrary, is accompanied by the reverse movement of the function, it is aimed at the contemplated world in order to build sensual phenomena in another – "artificial" series. If in myth the phenomena themselves, filled with expressive characteristics, predetermined the nature of the series to which they turned out to be subordinate, then in the scientific mindset, on the contrary, the series forces the phenomena to follow each other according to the order created in the ideal sphere. In this way, a scientific mindset is formed, which deprives the contemplated world in the scientific mindset lose spiritual depth. The worldview becomes completely profane.

What symbolic form still carries the ultimate truth, myth or science? Cassirer is sure: the spirit must be comprehended in its totality which only philosophy is capable of. The spirit must be studied throughout its existence and must be considered all the phases of development which it passes. One cannot study this or that symbolic form only in the final "dry" sign system; it must be studied in conjunction with the first subjective, living feeling with which it was originally united.

Kant believed that mathematics was the pride of the human mind, but Cassirer is sure that "there is a very high price to pay for this triumph of scientific reason. Science involves abstraction, abstraction is always the impoverishment of reality"<sup>320</sup>.

<sup>&</sup>lt;sup>320</sup> Cassirer E. Favorites. An Essay on Man. P. 610. (In Russian).

## REFERENCES

 Antukh G. G. Philosophy of Obviousness in Pure Logic E. Husserl//Bulletin of Tomsk State University. Philosophy. Sociology. Political science. — 2016. — № 4 (36). – P. 217–224. (In Russian).

2. Belov V.N. The Philosophy of Religion of Hermann Cohen and Eastern Jewry // Personality. Culture. Society. — 2019. – Vol. 21. — № 3–4 (103–104). — P. 43–48. (In Russian).

 Belov V.N. Philosophy of Religion by German Cohen and Western Christianity // Bulletin of the Orthodox St. Tikhon Humanitarian University. Series 1: Theology. Philosophy. Religious studies. — 2021. — № 94. — P. 23–36. (In Russian).

4. Binevsky I.A. Dialectics of the Sacred and Profane in the European Sociocultural Process: dis.... cand. phil. sciences. — M., 2012. — 178 p. (In Russian).

5. Bondarev D.E. German neo-Kantianism on the Essence of Modern Science and the Need to Transform its Philosophical Foundations // Bulletin of the University of Tver. — 2023. — № 1(63). — P. 228–242. (In Russian).

6. Bondarev D.E. "Sacred" and "Profane" in the Philosophy of E. Cassirer // Bulletin of the University of Tver. — 2023. — № 3(65). — P. 137–153. (In Russian).

7. Bondarev D.E. The Role of the "Symbolic Function" in the Formation of the Scientific Mindset in the Philosophy of E. Cassirer // Nauchnoe mnenie. — 2024. — № 6. — P. 30–38. (In Russian).

 Burlak S. A. Piraha Language and Colloquial Speech // Russian Journal of Cognitive Science. — 2018. — Vol. 5. — № 1. — P. 22–26. (In Russian).

9. Vasiliev V.V., Krotov A.A., Bugay D.V. History of Philosophy: Textbook for Universities. — M.: Academic project, 2008. — 783 p. (In Russian).

10. Vasilieva L.N. Goethe and Linnaeus: Two Typologies // Philosophy of law. — 2007.
— № 3 (22). — P. 41–50. (In Russian).

11. Weinmeister A.V. Symbolic Interpretation of Culture in the Concept of E. Cassirer and A.F. Losev: dis.... cand. phil. sciences. — St. Petersburg, 2006. — 194 p. (In Russian).

12. Gaidenko P.P. Scientific Rationality and Philosophical Reason. — M.: Progress-Tradition, 2003. — 690 p. (In Russian).

13. Galieva A.M., Ibragimova Z.Z. The Anthropological Nature of Language in Linguophilosophy V. von Humboldt // Scientific Notes of Kazan University. Series: Humanities. — 2012. — Vol. 154. — № 1. — P. 19–28. (In Russian).

14. Gordey E. A. Modality in Philosophy, Modal Logic and Linguistics // Bulletin of the Minsk State Linguistic University. Series 1: Philology. — 2020. — № 3 (106). — P. 19–26. (In Russian).

15. Gorokhov P.A. Philosophical Foundations of the Worldview of Johann Wolfgang Goethe: dis.... Dr. phil. sciences. — Orenburg, 2003. — 363 p. (In Russian).

16. Grachev M.V. Johann Wolfgang Goethe as a Gnoseologist and Methodologist: dis.... cand. phil. sciences. — M., 2003. — 168 p. (In Russian).

17. Grinenko G.V. History of Philosophy: Textbook. — M.: Yurayt–Izdat, 2005. – 685 p. (In Russian).

18. Gubman B. L. Contemporary Philosophy of Culture. — M.: "Russian Political Encyclopedia" (ROSSPEN), 2005. — 536 p. (In Russian).

19. Husserl E. Selected Philosophical Correspondence. — M.: "Phenomenology-Hermeneutics", 2004. — 310 p. (In Russian).

20. Husserl E. Logical Studies. Cartesian Meditations. European Sciences Crisis and Transcendental Phenomenology. Crisis of European Humanity and Philosophy. Philosophy as a Rigorous Science. — Mn.: Harvest, M.: AST, 2000. — 752 p. (In Russian).

21. Goethe J.W. The Doctrine of Color. Theory of Knowledge. — M.: Book house "LIBRO-COM", 2012. — 200 p. (In Russian).

22. Demidova M.V. Man as an "Animal Symbolicum" in the Philosophy of Culture of E.
Cassirer: Historical and Philosophical Analysis: dis.... cand. phil. sciences. — Saratov,
2008. — 175 p. (In Russian).

23. Durkheim E. Elementary Forms of Religious Life. — M.: Elementary Forms, 2018.
— 808 p. (In Russian).

24. Evlampiev I.I. The Formation of European Non-Classical Philosophy in the Second Half of the XIX – Early XX Centuries: a Textbook. — St. Petersburg: Publishing House of St. Petersburg University, 2008. — 226 p. (In Russian).

25. Zaugolnikova A.V. Philosophy of Myth F.V. J. Schelling // News of the Russian State Pedagogical University named after A.I. Herzen. — 2009. — № 107. — P. 89–94. (In Russian).

26. Ivanov A.V. Philosophical Fate of E. Cassirer // Bulletin of Moscow University. Series 7. Philosophy. — 1990. — № 5. — P. 30–50. (In Russian).

27. Isaeva A.V. Myth in the Philosophy of E. Cassirer: dis.... cand. phil. sciences. — Saratov, 2011. — 173 p. (In Russian).

28. Kadig-Ool Kh. K. The Main Stages of the Development and Formation of Modern Modal Aletic Logic: dis.... cand. phil. sciences. — M., 2013. — 111 p. (In Russian).

29. Kalinnikov L. A. Modality as One of the Foundations of the Philosophical System of Kant and its Connection with the Structure of the Language // Kant Collection. — 2017.
— Vol. 36. — № 1. — P. 7–18. (In Russian).

30. Kant I. Critique of Pure Reason. — M.: Nauka, 1999. — 656 p. (In Russian).

31. Kant I. Writings in Six Volumes. — M.: Thought, 1965. — Vol. 4. P.1. — 544 p. (In Russian).

32. Kant I. Writings in Six Volumes. — M.: Thought, 1965. — Vol. 3. — 799 p. (In Russian).

33. Cassirer E. Kant's Life and Teachings. — St. Petersburg: University Book, 1997. —
471 p. (In Russian).

34. Cassirer E. Favorites. Logic of Cultural Sciences. — M.; St. Petersburg: Center for Humanitarian Initiatives, 2016. — 400 p. (In Russian).

35. Cassirer E. Favorites. An Essay on Man. — M.: Gardarika, 1998. — 784 p. (In Russian).

Cassirer E. Favorites: Individual and Space. — M.; St. Petersburg: University Book,
 2000. — 654 p. (In Russian).

37. Cassirer E. Individual and the Cosmos in Renaissance Philosophy. — M.; St. Petersburg: Center for Humanitarian Initiatives, 2013. — 400 p. (In Russian).

38. Cassirer E. Cognition and Reality. The Concept of Substance and the Concept of Function. — M.: ITDGK "Gnosis", 2006. — 400 p. (In Russian).

39. Cassirer E. The Power of Metaphor // Metaphor Theory: Collection. — M.: Progress,
1990. — P. 33–43. (In Russian).

40. Cassirer E. Einstein's Theory of Relativity. — M.: LIBROKOM Book House, 2009.
— 144 p. (In Russian).

41. Cassirer E. Philosophy of Symbolic Forms. Volume 1. Language. — M.; St. Petersburg: University Book, 2002. — 272 p. (In Russian).

42. Cassirer E. Philosophy of Symbolic Forms. Volume 2. Myth. — M.; St. Petersburg: University Book, 2002. — 280 p. (In Russian).

43. Cassirer E. Philosophy of Symbolic Forms. Volume 3. Phenomenology of Cognition.
M.; St. Petersburg: University Book, 2002. — 398 p. (In Russian).

44. Kitaeva L.A. The Philosophy of Religion of German Cohen: dis.... cand. phil. sciences. — Saratov, 2005. — 154 p. (In Russian).

45. Knizhnik O. V. Ernst Cassirer's Symbolic Universe: dis.... cand. phil. sciences. —
M., 2007. — 153 p. (In Russian).

46. Kozhevnikov N. N., Danilova V. S. The Influence of Aristotle on the Formation of Scientific and Philosophical Methodology // Bulletin of the Northeastern Federal University Named After M.K. Ammosov. Series: Pedagogy. Psychology. Philosophy. — 2016. —  $N_{2}$  4 (04). — P. 45–51. (In Russian).

47. Koshelev A.D. On the Relativity of the "Exotic" Properties of the Language of the Piraha Indians and Their Principles of Perception of the World // Russian Journal of Cognitive Science. -2018. -Vol. 5. -N 1. -P. 7-9. (In Russian).

48. Koshelev A.D. On the Influence of the Culture of Society on his Language (on the Example of the Amazonian Tribe Piraha) // Russian Journal of Cognitive Science. — 2018. Vol. 5. —  $N_{2}$  1. — P. 44–64. (In Russian).

49. Kravchenko A. A. Substantiation by E. Cassirer of Humanitarian Knowledge: dis.... doc. phil. sciences. — M., 2000. — 366 p. (In Russian).

50. Cultural Studies. XX Century: Anthology. — M.: Lawyer, 1995. — 703 p. (In Russian).

51. Losev A.F. Dialectics of Myth. — St. Petersburg: ABC–Atticus, 2022. – 320 p. (In Russian).

52. Lotze G. Foundations of Practical Philosophy. — St. Petersburg: Type. M.I. Rumsha. 1882. — 87 p. (In Russian).

53. Mekel H. Is "Symbolic Expressiveness" a Phenomenological Concept? On the Relation of the Philosophy of Symbolic Forms by Ernest Cassirer and the Phenomenology of Edmund Husserl // Logos. — 1995. — № 6. — P. 127–143. (In Russian).

54. Mikirtumov I. B. The Main Ideas of Husserl's "Philosophy of Arithmetic" and Frege's Logicism // Logical and Philosophical Studies. — 2012. — № 10. — P. 39–53. (In Russian).

55. Motroshilova N.V. Early Philosophy of Edmund Husserl (Halle, 1887–1901). — M.: Progress-Tradition, 2018. — 624 p. (In Russian).

56. Mukhutdinov O. M. Dialectical History of Self-Awareness // News of the Ural Federal University. Series 3: Social Sciences. — 2017. Vol. 12. — № 1 (161). — P. 154–160. (In Russian).

57. Norkus Z. B. E. Husserl's Philosophy of Logic. Critical Analysis: dis.... cand. phil. sciences. — L., 1984. — 200 p. (In Russian).

58. Otto R. On the Irrational in the Idea of the Divine and its Relationship with the Rational. - St. Petersburg: ANO Publishing House of the St. Petersburg University, 2008. -272 p. (In Russian).

59. Parkhomenko R.N. Man as a Subject of Culture in the Philosophy of E. Cassirer: dis.... cand. phil. sciences. — M., 1999. — 152 p. (In Russian).

60. Pisarchik L. Yu. Philosophy of Culture and Methodology of Historical Knowledge of the Freiburg (Baden) School of neo-Kantianism // Bulletin of Orenburg State University.
2008. — № 2(81). — P. 31–46. (In Russian).

61. Plato. Works in 3 volumes. — M.: Thought, 1994. — 654 p. (In Russian).

62. Prokhorov A.I. Act of Knowledge and its Modal Analysis. Identifying the Prerequisites of the Semantic Theory of E. Husserl // Philosophy of Science and Technology. -2018. -Vol. 23.  $-N_{2} 1$ . -P. 43-53. (In Russian).

63. Pylaev M.A. Philosophy of Religion in the Phenomenology of Religion Rudolf Otto // Bulletin of the Orthodox St. Tikhon Humanitarian University. Series 1: Theology. Philosophy. — 2011. —  $N_{2}$  6 (38). — P. 59–74. (In Russian).

64. Russell B. History of Western Philosophy. In 3 books. — Novosibirsk: Sib. Univ. Publishing house, 2007. — 992 p. (In Russian).

65. Rickert H. Boundaries of Science Education Concepts. — St. Petersburg: Science, 1997. — 533 p. (In Russian).

66. Svasyan K. A. Philosophy of Symbolic Forms E. Cassirer: Critical Analysis. — Er.: Publishing House of the Academy of Sciences of the ArmenianSSU, 1989. — 238 p. (In Russian).

67. Svasyan K. A. Goethe's Philosophical Worldview. — M.: Evidentis, 2001. — 225 p. (In Russian).

68. Sedov Yu. G. Phenomenological Study of Spatial Structures in Mathematics and Modal Logic // Bulletin of Chelyabinsk State University. — 2022. — № 2 (460). — P. 89–95. (In Russian).

69. Semenov V.E. The Basic Principles of the Transcendental Method of I. Kant // Bulletin of the Russian State Humanitarian University. Series: Philosophy. Sociology. Art history. — 2008. № 7. — P. 11–23. (In Russian).

70. Serkova V. A. Description of a Phenomenological Subject in the Light of the Logic of the Obvious Edmund Husserl // Logical and Philosophical Studies. — 2011. — № 9.
— P. 110–125. (In Russian).

71. Sidorenko N.I. Ontological and Epistemological Foundations of Science in the Philosophy of Plato // Bulletin of the Russian Academy of Economics named after G.V. Plekhanov. — 2004. —  $N_{2}$  3. — P. 10–25. (In Russian).

72. Soboleva M.E. Philosophy of Symbolic Forms E. Cassirer and the Formation of non-Classical Philosophy: dis.... cand. phil. sciences. — St. Petersburg, 2000. — 161 p. (In Russian).

73. Sokuler Z. A. German Cohen and his Idea of the Logic of Pure Knowledge // Bulletin of the Peoples' Friendship University of Russia. Series: Philosophy. — 2021. — Vol. 25.
— № 3. — P. 378–393. (In Russian).

74. Toporkov V. S. The Problem of Interpreting the Theory of Modal Concepts of Aristotle: Logical–Ontological Aspects: dis.... cand. phil. sciences. — M., 1999. — 138 p. (In Russian).

75. Fedorovskikh A. A. Transformation of the Sacred and Profane in Society: Myth-Religion-Ideology: dis.... cand. phil. sciences. — Yekaterinburg, 2000. — 142 p. (In Russian).

76. Feis R. Modal Logic. — M.: Nauka, 1974. — 520 p. (In Russian).

77. Florensky P. A. Imaginary in Geometry. — M.: "Azure", 1991. — 96 p. (In Russian). 78. Khalzova I.V. The Concept of the Sacred in the Works of Rudolf Otto and Protopr. Alexander Schmeman // In the Collection: XXVII Sretensky Readings. Materials of the All-Russian (National) Scientific and Theological Conference with International Participation. St. Philaret Orthodox Christian Institute. Moscow, 2021. — P. 317-322. (In Russian).

79. Schelling F.W. J. Works in 2 volumes. — M.: Thought, 1989. — Vol.2. — 636 p. (In Russian).

80. Shilova S. A. The Problem of Language in the Symbolic Idealism of E. Cassirer: dis.... cand. phil. sciences. — Saratov, 2008. — 195 p. (In Russian).

81. Shishkov I.Z. History of Philosophy: Reconstruction of the History of European Philosophy Through the Prism of the Theory of Knowledge. Tutorial. — M.: LIBROKOM Book House, 2013. — 848 p. (In Russian).

82. Stoff V. A. Problems of Sensory Cognition and Clarity in the "Criticism of Pure Reason" by I. Kant // Kant Collection: Interuniversity Thematic Collection of scientific Works. — 1982. —№1 (7). — P. 26–39. (In Russian).

83. Enns I.A. The Problem of Intersubjectivity in the Philosophy of I. Kant // Bulletin of Tomsk State University. — 2005. — № 287. — P. 88–90. (In Russian).

84. Cassirer E. Determinism and indeterminism in modern physics; historical and systematic studies of the problem of causality. — New Haven: Yale University Press, 1956. - 225 p.

85. Cassirer E. Determinismus und Indeterminismus in der modernen Physik, Historische und systematische Studien zum Kausalproblem. — Göteborg: Wettergren & Kerber, 1936. — 265 S.

86. Cassirer E. Freiheit und Form. Studien zur deutschen Geistesgeschichte. — Berlin: Bruno Cassirer, 1918. — 574 S.

87. Cassirer E. Leibniz' System in seinen wissenschaftlichen Grundlagen. — Marburg: Elwert, 1902. — 548 S.

88. Cassirer T. Mein Leben mit Ernst Cassirer. — Hildesheim: Gerstenberg Verlag. 1981.
— 362 S.

89. Cassirer E. The Myth of the State. — New Haven: Yale University Press, 2008. —
303 p.

90. Gay P. The Social History of Ideas: Ernst Cassirer and After // The critical spirit. Essays in Honor of Herbert Marcuse. — Boston: Beacon Press, 1967. — P. 106–120.

91. Graeser A. Ernst Cassirer. — Munich: C.H. Beck, 1994. — 234 p.

92. Hamburg C. H. A Cassirer-Heidegger seminar // Philosophy and Phenomenological Research. — 1964. — Vol. 25 (2). — P. 208–222.

93. Hamburg C.H. Symbol and Reality: Studies in the Philosophy of Ernst Cassirer. — The Hague: Martinus Nijhoff, 1956. — 172 p.

94. Itzkoff S. W. Ernst Cassirer: scientific knowledge and the concept of man. — Notre Dame, Indiana: University of Notre Dame Press, 1971. — 286 p.

95. Jamme Ch. Ueberrationalismus gegen Irrationalismus. Husserls Sicht der mythischen Lebenswelt // Jamme Ch., Pöggeler O. Phänomenologie im Widerstreit. Zum Todestag Edmund Husserls. — Frankfurt: Suhrkamp Verlag, 1989. — S. 65–80.

96. Knoppe T. Die theoretische Philosophie Ernst Cassirers. — Hamburg: Felix Meiner, 1992. — 204 S.

97. Krois J.M. Cassirer: Symbolic Forms and History. — New Haven, Connecticut: Yale University Press, 1987. — 262 p.

98. Lipton D. R. Ernst Cassirer: The dilemma of a liberal intellectual in Germany, 1914-

1933. — Toronto: University of Toronto Press, 1978. — 228 p.

99. Luft S. Cassirer's Philosophy of Symbolic Forms: between Reason and Relativism; a critical appraisal // Idealistic Studies. — 2004. — Vol. 34. — Issue 1. — P. 25–47.

100. Morris Ch. The Foundation of the Theory of Signs // Encyclopedia of the Unified Sciences. — Chicago: Chicago University Press, 1938. — P. 1–59.

101. Natorp P. Allgemeine Psychologie Nach Kritischer Methode. Erstes Buch: Objekt Und Methode Der Psychologie. — Charleston: Nabu Press, 2011. — 368 s.

102. Orth E. W. Ernst Cassirer as cultural scientist // Synthese. — 2011. — Vol. 179 (1) — P. 115–134.

103. Orth E. W. Ernst Cassirers Philosophie der symbolischen Formen und ihre Bedeutung fur unsere Gegenwart // Deutsche Zeitschrift fur Philosophie. — 1992. — Bd.
40. — S. 119–136.

104. Paetzold H. The Symbolic Language of Culture, Fine Arts and Architecture: Consequences of Cassirer and Goodman: Three Trondheim Lectures. — Trondheim: FF Edition, 1997. — 61 p.

105. Schilpp P. A. The philosophy of Ernst Cassirer. — Evanston, Illinois: The Library of Living Philosophers, 1949. — 936 p.

106. Schrag C.O. Heidegger and Cassirer on Kant // Kant-Studien. — 1967. — Bd. 58.
— S. 87–100.

107. Schwemmer O. Ernst Cassirer: ein Philosoph der europäischen Moderne. — Berlin: Akademie Verlag, 1997. — 265 S.

108. Skidelsky E. Ernst Cassirer: The Last Philosopher of Culture. — Princeton: Princeton University Press, 2008. — 288 p.

109. Usener H. Göternamen. Versuch einer Lehre von der religiösen Begriffsbildung. — Bonn: Verlag von Friedrich Cohen, 1896. — 391 S.