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## ARCHETYPE AS A SOURCE OF INNOVATION PROCESS

**Annotation.** The article is devoted to the evolution of the social institute of science, its interrelation with social needs, the influence of the archetypes of individual and collective on the innovative activity of a scientist. It is proved that the basis of the development of modern as postmodern rational society is the phenomenon of innovation, which is produced by the social institute of science. In particular, we are talking about the fact that science can be considered in different contexts: as a specific system of special knowledge, as a system of social institutes that are oriented towards innovation, and as a search for truth. The socio-psychological nature of scientific knowledge is revealed, which is related not only to the individual achievements of the researcher, but also to the manifestation of the collective unconscious, in particular archetype-logos as an intangible cultural-historical result of the development of the social institute of science. An application of the national model of '*Universal Landmark Cycle*' for the research institute of science, which allows considering the social institute of the natural logic of its cultural-historical formation and development. Based on the idea of the Frenchman Gilbert Durand on the existence of two classes of archetypes (logos and myths), the focus is on the two psychosocial varieties of the scientist (rational and irrational) and the results of their participation in the innovation process. The first ones are inclined to articulate innovative ideas, the source of which 'the inspiration' is archetype-logos, while others are naturally inclined to produce new myths, the source of which is the archetype-mythos. In conclusion, the article aims at conducting a special study of the evolutionary logic of the innovation process from antiquity to the present with the allocation of 'subject specificity' in this process of each of the socio-historical epochs. The task is also to determine the mechanisms of the interrelation of the individual innovative conscious and archetypal collective unconscious.

**Keywords:** archetype, individual, innovation, collective, logos, mythos, science, psychosocial type, social institute, universal epochal cycle.

## АРХЕТИП ЯК ДЖЕРЕЛО ІННОВАЦІЙНОГО ПРОЦЕСУ

**Анотація.** Стаття присвячена еволюції соціального інституту науки, його взаємозв'язку з суспільними потребами, впливу архетипів індивідуального

та колективного на інноваційну діяльність вченого. Доводиться, що в основі розвитку сучасного — постмодерного раціонального суспільства лежить феномен інновації, який продукується соціальним інститутом науки. Зокрема, мова йде про те, що науку можна розглядати в різних контекстах: як специфічну систему спеціальних знань; як систему соціальних інститутів, орієнтованих на інновації; як діяльність, націлену на пошук істини. Розкривається соціально-психологічна природа наукового знання, яка пов'язана не тільки з індивідуальними досягненнями дослідника, а й виявом колективного несвідомого, зокрема архетипу-логосу як нематеріального культурно-історичного результату розвитку соціального інституту науки. Обґрунтовується застосування вітчизняної моделі “Універсального епохального циклу” для дослідження інституту науки, яка дає можливість розглянути цей соціальний інститут у природній логіці його культурно-історичного становлення і розвитку. Спираючись на ідеї французького філософа Жільбера Дюрана про існування двох класів архетипів (логос і міфос), акцентується увага на двох психосоціальних різновидах ученого (“раціонала” й “іраціонала”) і результатів їх участі в інноваційному процесі. Перші виявляють схильність до артикуляції інноваційних ідей, джерелом-“натхненником” яких виступає архетип-логос у той час, як інші природно налаштовані на продукування нових міфів, джерелом яких виступає архетип-міфос. У висновку стаття скеровує на проведення спеціального дослідження еволюційної логіки інноваційного процесу від античності до сучасності з виокремленням “предметної специфіки” в цьому процесі кожної із суспільно-історичних епох. Ставиться також завдання визначення механізмів взаємозв'язку індивідуального інноваційного свідомого і архетипного колективного несвідомого.

**Ключові слова:** архетип, індивідуальне, інновація, колективне, логос, міфос, наука, психосоціальний тип, соціальний інститут, універсальний епохальний цикл.

## АРХЕТИП КАК ИСТОЧНИК ИННОВАЦИОННОГО ПРОЦЕССА

**Аннотация.** Статья посвящена эволюции социального института науки, его взаимосвязи с общественными потребностями, влиянию архетипов индивидуального и коллективного на инновационную деятельность ученого. Доказывается, что в основе развития современного — постмодернистского рационального общества лежит феномен инновации, который продуцируется социальным институтом науки. В частности, речь идет о том, что науку можно рассматривать в различных контекстах: как специфическую систему специальных знаний; как систему социальных институтов, ориентированных на инновации; как деятельность, нацеленную на поиск истины. Раскрывается социально-психологическая природа научного знания, которая связана не только с индивидуальными достижениями исследователя, но и проявлением коллективного бессознательного, в частности архетипа-логоса как нематериального культурно-исторического результата развития социального института науки. Обосновывается применение отечественной модели “Уни-

версального эпохального цикла” для исследования института науки, которая дает возможность рассмотреть этот социальный институт в естественной логике его культурно-исторического становления и развития. Опираясь на идеи француза Жильбера Дюрана о существовании двух классов архетипов (логос и мифос), акцентируется внимание на двух психосоциальных типах ученых (“рационала” и “иррационала”) и результатах их участия в инновационном процессе. Первые проявляют склонность к артикуляции инновационных идей, источником-“вдохновителем” которых выступает архетип-логос в то время, как другие естественно настроены на продуцирование новых мифов, источником которых выступает архетип-мифос. В заключении статья направляет на проведение специального исследования эволюционной логики инновационного процесса от античности до современности с выделением “предметной специфики” в этом процессе каждой из общественно-исторических эпох. Ставится также задача определения механизмов взаимосвязи индивидуального инновационного сознательного и архетипного коллективного бессознательного.

**Ключевые слова:** архетип, индивидуальное, инновация, коллективное, логос, мифос, наука, психосоциальный тип, социальный институт, универсальный эпохальный цикл.

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**Problem statement.** Postmodern rational society, the key mechanism of development of which is innovation and the innovation process, actualize the problems related to the functioning and development of the social institute of science. The latter can be considered in various epistemological contexts, in particular: as a special system of knowledge; as a specific system of public institutions designed to produce, store and disseminate knowledge; and as a specific kind of activity aimed at obtaining certain cognitive results. At the same time, the deepening of the social and psychological nature of the development of scientific knowledge requires an adequate reflection on both the historical aspects of the development of science and the latest tendencies in scientific and theoretical synthesis and applied research. First of all, this re-

lection concerns the psychosocial aspects of the formation of a postmodern knowledge society, in which the acquisition, dissemination, assimilation and production of new knowledge is not only a result of the cognitive activity of a separate investigator-individual, but also the manifestation of a specific class of archetypes-logos as a cultural and historical result of the development of a social institute of science [1].

**The purpose of the article** is an attempt to apply the national model of the Universal Epochal Cycle for the study of the social institute of science and the sources of its development in the modern postmodern society.

**Analysis of recent researches and publications.** An overview of scientific literature on the issue of research suggests that the social institute of science (as well as other social institutions)

has its own development logic. At the individual level, it lies in the various phases of the work of the scientist, when in stages the birth of new ideas, their testing and processing of research results, the search for new, often intuitive solutions occurs. At the social and civilizational levels, science is today influenced by the socio-cultural environment and, in particular, under the influence of the diversity of other social institutions of society. Max Weber in 1921 study, devoted to world religions, concluded that in the process of division of labour science excels in an industry under the influence of '*a certain configuration of social values*' [2, p. 30]. Another German sociologist K. Mannheim considered the sociology of knowledge not only as a result of thinking, but also as a consequence of the ordering of the stock of knowledge available in social reality. In his opinion, knowledge must correct the historical and cultural process on the basis of adequate understanding and explanation of its social essence [3, p. 46]. Robert Merton in the book *Science, Technology & Society in England of the Seventeenth Century*, published in 1938, noted that the basic values of Puritan morality, that is, utilitarianism, rationalism, individualism, had a decisive influence on the institutional features of contemporary European science. Among these values, R. Merton highlighted: universalism, that is, attempts to assess all knowledge in terms of their compliance with universal criteria of science, their universality or the availability of scientific research results to the entire scientific community, because the results of research are estimated by the whole scientific

community. In the end, these values are the ethos of science and academics as a professional social community. In general, the concept of sociology of science, proposed by R. Merton in the literature, was called the normative approach. Instead, the cognitive concept of the sociology as science, proposed by M. Malkey, puts the cognitive function of science in direct dependence on its social function.

The key hypothesis advanced in this article relates to the attempt to consider within the framework of the cyclical conception of socio-historical development and the various stages of the evolution of the social institute of science: from pre-classical, classical, non-classical and post-classical science. At each of these stages of institutionalization of science, which correspond to the individual stages of the deployment of the universal epochal cycle (revolution, involution, co-evolution and evolution) [4, p. 139–210], specific tasks are solved.

Thus, science becomes an instrument for solving specific socio-historical tasks that arise on the way of the formation and development of society. In accordance with the concept proposed by O. Conte, these tasks become evident in the context of two invariant types of cognitive activity as follows: (1) *myth-making* as a form of actualization of ancient traditional knowledge; and (2) *experiment, rationalization and social practice*: not only as a criterion of truth, but also as an element of communication with specific social needs. Moreover, each new stage in the development of science, as if on the model of a doll, imparts the achievements of predecessors and creates the precondi-

tions for the subsequent cultural-historical periods of innovation.

**Presentation of the main material.**

First of all, it is important to note that in the modern innovation process, as well as in its early cultural-historical forms of the Roman Antiquity and the Enlightenment, the leading role is played by scholars who, like representatives of Greek-Roman Alchemy, combine intuitive (mystical) and rational methods of cognition, which update and relevant psychological mechanisms for ensuring the needs for the functioning and development of science. So, we are talking about people of a certain psychological composition (psychosocial type [5]) and their psychological mechanisms as follows: (1) *intuition and intuitive thinking*, as a sensory-perceptual set that provides the connection of man with the treasury of innumerable riches of archetype-logos (one of the varieties of the collective unconscious), and (2) *rationality*, which, at least since the institutional self-determination of classical European science has become and until recently remained the dominant. Both of these start-up research activities are the two ends of the Ariadne thread, which lead scientists to find truth labyrinths.

The Epoch of Postmodernism, as the summit of civilizational modernity, sets out a new rational vector of development of science; nevertheless, the mythological as a regulator of intuitive thinking, which in general changes the social conditions of the conditioned knowledge [6, p. 10]. The content of the knowledge gained today is determined not only by the nature of the object of cognition altered by nature (when the focus of attention is trans-

lated from the external forms of objects and things into internal ones, including psychological ones), but also by group, professional, caste, ideological and other attitudes and interests. The experiment and the logic of scientific argumentation are of particular importance in these conditions. Accordingly, the rational psychosocial type of scientist becomes the dominant one.

We recall that at the end of the 19th century F. Engels in the labour '*Dialectics of Nature*' (1872), referring to the social needs in the scientific understanding of the world, suggested that the classification of the sciences in the basis of which put the form of movement of matter as follows: Mathematics, Mechanics (including Astronomy), Physics, Chemistry, Biology, the Science of Thinking and the Science of Society [7, p. 564–571]. In this form, this classification reflects tendencies in the development of fundamental and applied sciences in the West. But in the beginning of the 21<sup>st</sup> century, it becomes clear that the natural sciences substantially outstripped the humanities in shaping the scientific picture of the world. In particular, this applies to the applied component of management not only material, but also social world.

In view of this, under the new conditions, the British philosopher G. Ryle proposed (1949) the typology of knowledge by type of knowledge '*how*' and knowledge '*what*' [8, p. 318–319]. From a purely rational, even utilitarian point of view, knowledge means to be able to do something. At the same time, theoretical, fundamental understanding of applied synthesis lags behind today in the West from purely applied research, which creates a modern

specific crisis of the Western paradigm of science. Instead, for the Eastern scientific tradition, fundamental research was peculiar, which is now reoriented on applied interdisciplinary scientific research.

However, another cycle earlier, during the Enlightenment, I. Kant proposed to find a general and correct criterion of truth for any knowledge [9, p. 159]. However, looking for a specified universal criterion outside the historical method, that is, the interpretation of the relationship between the development of science and the interests of various social groups, ideologies, specific historical events, is impossible. In particular, I. Kant tried to find an answer to the question of how Logic based Mathematics can be applied to the nature sciences, which are based on observation and experiment. This outstanding citizen of Königsberg believed that *time and space exist in our minds regardless of any experience*. The time-spatial continuum is a transcendental a priori prerequisite for experience. Therefore, according to Kant, Arithmetic and Algebra, which arose on the basis of the idea of time, and Geometry that is related to space can be used in empirical knowledge. The above knowledge is systematized using twelve main categories that describe certain things in terms of quantity and quality, finality and infinity, randomness and necessity, and so on. In essence, this is knowledge of the outer side of things. The inner side of the *'thing in itself'* is inaccessible to knowledge by the mind.

G. Geogel made a significant contribution to the Sociology of Knowledge, who noted that any knowledge

is the result of development. It arises, changes under the influence of internal contradictions and turns into their opposite. True, he considered nature after the act of creation as an unchanging data, and according to the laws of development gave the right to exist to knowledge and society only.

Instead, K. Marx determined the social practice by the criterion of objective truth. In his view, the technological revolution is an impetus for social change. At the same time, the victories of technology seem to be bought at the cost of moral degradation of man and society. All our discoveries, all our progress lead to the fact that material forces are endowed with intellectual life, and human life, devoid of its intellectual component, goes down to the level of simple material power.

Consequently, understanding the nature of knowledge should cover the process of the emergence, development, verification and change of scientific paradigms, as well as the social organization and ethos of science and scholars. And the Sociology of Knowledge should include the study of socially determined history of scientific thought. In this unanimous opinion, the Polish researcher B. Skaragh introduces the concept of *'intellectual formation'*, which is important for the Sociology of Knowledge, as an aggregate of forms and essential content of thinking in a certain historical period [10, p. 13]. Directly the development of the Sociology of Knowledge, the definition of its subject field and the range of research is associated with German sociologists, first of all, Max Weber, who made a significant contribution to understanding the ethos of the scientist,

considering science as a vocation and profession, and Carl Mannheim, who also considered the phenomenon of the development of the European science through the prism of the Sociology of Knowledge [2, p. 127].

Beginning from the 60s of the 20<sup>th</sup> century, considerable attention in the publications devoted to the coverage of the historical and social aspects of the development of science, was devoted to the problems of the social consequences of the scientific and technological revolution. Within the framework of the classical Marxist paradigm, the key role of science's progress was recognized as a prerequisite for the social liberation of human. After all F. Engels noted that production is moving science forward faster than a dozen universities. Especially characteristic of this phenomenon was for the dawn of the Industrial Era in the history of mankind [3, p. 42].

The social dynamics of gaining new knowledge in the conditions of growing tendencies in the development of the scientific and technological revolution has led to an in-depth development of the socio-philosophical interpretation of the genesis of scientific knowledge.

So, in 1962, Thomas Kuhn published the work *The Structure of Scientific Revolutions*, in which he proposed a two-stage model of the mechanism for the development of science as a social institution. That is, at a normative stage a certain paradigm is established. Scientists who adhere to it form a specific community that exists and functions in accordance with its standards and scientific criteria. At this stage, there is a clarification of the facts, approbation of theories that agree with

the empirical. In the process of research, artefacts can be found that do not fit into the old scientific paradigm and require new hypotheses and theories for the purpose of their interpretation. Finally, the emergence of a new paradigm T. Kuhn calls the scientific revolution [11, p. 25].

However, in today's conditions of development of post-classical science more adequate, in our opinion, is a cyclic model of the development of science. Each of its cycles consists of four periods (revolution, involution, co-evolution and evolution) and the total number of such cycles is today three. In our opinion, this model more clearly communicates the historical aspects of the development of scientific knowledge.

1. In particular, the revolutionary stage *of the First Cycle of Science Development*, associated with its emergence as a kind of intellectual activity in the Ancient East and in the Ancient World. Science arises as a result of the distribution of words and words of man and the surrounding world, subject and object, knowledge and ethics.

At the same time, according to the Platonic idea expressed in the involutionary period of human history, reality was divided into the world of ideas and the world of human existence. A specialist in the History of Ancient Philosophy A. Losiev noted that the ideas of Plato can be interpreted and purely from materialistic positions as an understanding of the essence, that is, the totality of the main characteristics of certain things and processes. That's how Aristotle interpreted his teacher. But Plato understood knowledge as the reflection by human organs of the



senses of the higher world of ideas as '*a kind of movement from ideal to material*', in which philosophers, through the help of intuition, is better able to know the world. In these intermediate precision results of knowledge, according to the supporters of the Platonic School, gives Mathematics. Physics, which is mainly based on observation, gives the most imperfect knowledge.

At the same time, Aristotle, unlike Plato, emphasized that the ideas, on the contrary, are generalizing the essence of things and only the latter really exist. Therefore, the main source of knowledge is not the abstract knowledge of ideas, but the study of real concrete things, phenomena and processes. According to Aristotle, the most valuable knowledge is given by research, which is based on observation and logic, that is, Physics and Mathematics. It was Aristotle, who first built the formal-logical structures of knowledge, and began to characterize scientific knowledge as a network of statements related to each other according to the laws of Logic.

In general, the science of the Greek Era (involutional) and Roman (evolutionary) Antiquity was intellectual elite of free people only, who were not engaged in physical labour. World view of the Greeks who adored nature, ruled out the possibility for active experimentation. Apparently, a certain dichotomy between Platonic and Aristotelian approaches to the Theory of Knowledge eventually provoked differences between traditional and purely scientific knowledge, between intuition and reason. Moreover, these contradictions continue to this day. Elements of the Greek ancient scien-

tific tradition were adapted by Arabian medieval scholars primarily in encyclopaedic form. Instead, the Europeans, thanks to the Crusades, the subsequent trade and cultural exchange, once again received access to the heritage of ancient thought. Along with the revelation as the supreme source of knowledge, intelligence was allocated as a source of knowledge about the secrets of the world, the logic of the ability to consistently think, as well as sensory knowledge as the source of many mistakes. However, it was on sensory knowledge that was based on various experimental studies that eventually stimulated the development of modern science.

2. The Religious Reformation Era changed the perception of the place of man in the world, stimulated new paradigms in the development of scientific knowledge, both fundamental and applied. A peculiar symbol of empirical knowledge *the Second Cycle of Development* of Science as the involutory Renaissance (14<sup>th</sup>–16<sup>th</sup> centuries) and the evolutionary Enlightenment (17<sup>th</sup>–18<sup>th</sup> centuries) became the aphorism of English politician and thinker Francis Bacon '*Knowledge is the power*' that he formulated in the methodological work *New Organon* (1620). From this time, exact sciences become directly related to experiment and Mathematics. The leading role of the experiment significantly influenced humanitarian knowledge in the context of attempts to build mechanistic models of society.

In the 16<sup>th</sup> and 18<sup>th</sup> centuries, intensive development of factories, which require the solution of a number of technical problems. In these socio-historical conditions, R. Descartes

solves the problems of Mechanics, and F. Bacon puts forward the key thesis of a new science, sets it the goal of domination over nature in order to improve the welfare of society and improve production. Thus, the modern ethos of science was formulated [12, p. 54].

A special place in the history of science is the Period of the Enlightenment, which is identified with the beginning of the evolutionary stage of the development of scientific knowledge of the Second Epochal Cycle. Finally in the 17<sup>th</sup> century greatly influenced the development of science rationalism (R. Descartes, B. Spinoza and G.-B. Leibniz) and empiricism (F. Bacon, J. J. Locke).

Rationalists emphasized the exceptional importance of evidence-based logical knowledge. Instead, empiricism sought to answer the question of a source of knowledge about a real, changeable sensory world, which is not identical to purely mathematical schemes. In particular, D. Hume noted that if the only source of knowledge is a feeling, then it is impossible to know if there is anything outside of them, we can know nothing but feelings.

3. Complex and controversial turned out to be *the Third Cycle of Science Development*, associated with the Social Modernity Era (18<sup>th</sup> – early 20<sup>th</sup> century) and the Postmodern (mid-20<sup>th</sup> – early 21<sup>st</sup> century). In particular, the philosophical thought of the Modernism Era, which it began the Great French Revolution (1789–1794), mainly gives this social-historical epoch a rationality as a term in the broadest sense that signifies wisdom, consciousness, and the opposite of irrationality [13]. Instead, society as a

whole and the social qualities of an individual in this Era are exclusively behavioural categories of irrational.

In fact, the rational features of society, science and culture are acquired in postmodern society, which originates from the events of the Great Depression (1929–1933) in the United States, spread after the World War II in Western Europe and Japan, and gaining new strength in the late 20<sup>th</sup> – early 21<sup>st</sup> century in the rest of the world, including in the Post-Soviet Space.

Paradoxically, but at the current evolutionary stage of the development of science and electronic information communications, when sensory knowledge on the screen of a personal computer again becomes a leading form of intellectual activity, the human mind is again in a virtual reality that is subject to the rationalism of mathematical programming logic only.

Finally, the socio-cultural conditionality of modern society and its scientific innovations, which have substantially advanced the European society, is illustrated by the historical example of the use of gunpowder. In particular, it is known that its properties were first discovered by Chinese alchemists, but its military use was gunpowder in Europe. The Chinese used it predominantly for holiday fireworks, and Europeans, mainly used to inflict the maximum damage to the enemy. However, the greatest consequences of this invention have caused in Europe not much medieval castles and chivalry, as feudal social culture as a whole, stimulating the first sprouts of centralized national states.

In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, the nature of the relationship between

science and society gradually changes. By accumulation of a rich heritage of empirical knowledge, science summarizes the achievements of practice and goes on to more effectively solve the problems that practice put it before it. Moreover, engineering thought and scientific creativity develop in parallel. Karl Popper, in particular, noted that knowledge is evolving, not faster than the feedback is formed through the attempt of their verification and validation. Therefore, in his opinion, changes in society will also take place no sooner than there will be a request for verification of the acquired social knowledge in society.

A fundamentally new stage in the development of scientific knowledge came from the beginning of scientific and technological progress, which significantly influenced social relations. It should be noted that the technological factor has always played a significant role not only in economic and social processes, but also influenced the formation of the political system of the modern world. Americans Elvin Toffler, in describing the agricultural, industrial and post-industrial epochs, and Francis Fukuyama, who rightly pointed out that the industrial age with its factories, railways and a new social structure enabled the emergence and functioning of the Weberian centralized state [14, p. 94].

Strengthening the institutional influence of science during the scientific and technological revolution is associated with a change in the social status of a scientist. In the context of this trend, the French sociologist P. Bourdieu considers professional or academic rank as a certain legal rule of

social perception, being perceived as a guaranteed right. It is an institutionalized and legitimate symbolic capital, which is inseparable from the academic rank [15, p. 75]. The development of scientific and technical research stimulates a wave of new social practices, the patenting of scientific discoveries, and so on.

Access to information and the speed of its receipt changes our imagination in terms of global and regional boundaries. And our intellect essentially changes traditional social practices and material production. The determinants of this are innovation, education and qualifications. Characteristic features of classical European scientific knowledge are attempts to achieve the greatest possible efficiency. The motivation of cognition, being one of the defining features of human nature, tries to reach the thought of the most mysterious and most dangerous depths of truth as to the secrets of the nuclear structure and the origins of the human genome.

The new communicative environment transforms the very nature of information and the information network of sociality. Thanks to the communicative revolution, mankind was given the opportunity to spread his knowledge quickly. High technologies and biotechnology change the human world. For a long time, opportunities for cloning a person are putting pressure on established religious beliefs and values. Total computerization changes the perception of the material and virtual worlds, when in the first of them is the physical body of human, and in the second – his spirit.

Consequently, the more effective the science becomes, the less capable it is to

find the answer to the question of the meaning of human existence. In view of this, new mechanisms of interaction between scientific and social processes are needed. The thought of the ancient Greeks remains relevant only: the one, who progresses in the Sciences, but lags behind in morality, rather regresses than progresses. That is, the advantage of purely cognitive rationalist scientific procedures, oriented mainly on utilitarian daily needs, pushes the normative functions of science to the foreground. Russian scientist S. Kara-Murza rightly emphasizes that science replaced the church as the highest authority that legitimizes the political system and social order [16, p. 6].

In general, for the first time, the acute sense of the crisis of the scientific vision of the modern world picture was observed at the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries, when the discovery of an electron buried hopes for the atom as the foundation of the Universe. At the beginning of the 21<sup>st</sup> century, the Russian philosopher Alexander Panarin rightly emphasized the change in the ideological atmosphere in the scientific environment. The idea of progress that has matured in the depths of science has become one of the main reasons for the ideology of industrialism; it seems to be experiencing a crisis with it. The main postulates of the idea of progress are put into question (doubt). Firstly, it was doubtful that the artificial, created by the recipes of advanced scientific knowledge is better than natural or inherited from ancestors. Secondly, denied belief in the infinity of progress, finally, thirdly, the idea of socio-cultural uniqueness of progress is rejected [17, p. 91].

In the current transitional state, Ukrainian society and most countries of the world are 'experiencing' institutional changes, eroding social structures, weakening social ties, and breaking the hierarchy of factors that constitute mechanisms for the reproduction of social structures. In particular, the causal relationship underlying the rational scientific method is eroded [17, p. 308].

As a result, the temporary failure of certain technical solutions, as a product of a scientific model of the vision of the world, is as insolvent as the model itself. So, any technical problems are fundamentally impossible to solve in one model, are solved in another. In the end, we cannot tell today what exactly historically driven knowledge set yesterday, tomorrow will be disavowed. Recognizing the probable nature of knowledge, we must agree with the thesis that predictions of the past are as complex as predicting the future [18, p. 212].

Thus, we can state that at the current transitional stage of social development, as the applied knowledge is systematized, the social need for fundamental theoretical understanding of such achievements increases. First of all, it concerns the scientific tradition that has taken shape in the transatlantic civilization. Instead, the current scientific crisis in the countries of the East and the South can be regarded as transforming their former fundamental science towards highly specialized applied research, and hence the need for interdisciplinary communication and comparativism is needed to maintain a holistic scientific vision.

The current evolutionary stage in the development of science, which we

are unilaterally linked to today with the influence of the processes of globalization (universalization), is in fact under the influence of a situation in which, as Scottish sociologist Roland Robertson notes, '*global and local tendencies complement and interpenetrate each other, although in specific situations can come into collision*' [19]. In this context, the President of the International Sociological Association, A. Martinelli, points out, that international academic associations, are trying to strengthen the prestige and influence of a particular professional community. Therefore, international scientific associations in the field of social sciences are called to promote global governance by enriching public discourse at the world level, through an honest analysis of various dimensions of globalization [20, p. 25]. This also applies to research tasks in the field of Sociology of Knowledge and its historical aspects, consisting of interdisciplinary and comparative studies designed to promote the search for a new paradigm of post-classical science.

Today, however, the attention of scientists from most countries of the world who work in various fields of knowledge focuses on the needs of applied research, and therefore there is an accumulation of substantial amounts of applied knowledge, which will require and theoretical reflection. This task becomes relevant for the Western transatlantic civilizational area, which is now torn up by a new post of post-modern perspective on the development of the Institute of Knowledge.

It is the multidimensional property of the tasks of the institute of science today, in our opinion, defines a new

paradigm of post-classical science for the Western and Eastern civilizational habitats.

**Conclusions and prospects for further researches.** The passage of the cultural-historical analysis of the development of the Institute of Science in the article proves the existence of a tight relationship between the psychosocial properties of the scientist and the results of its innovation activity. In this regard, it seems expedient to expand with the use of the domestic methodological model of '*Universal Epochal Cycle*'. It is a special complete (from antiquity to modernity) analysis of the study of the logic of the formation and development of the innovation process, while highlighting the followings:

- '*Subject specificity*' in the innovation process of each of the socio-historical epochs;

- *Sources of development of the space of archetypes of the collective unconscious*, based on the theory of the phased formation of the intellectual action of Petr Galperin, in particular, its components, such as: genesis (material, materialistic, perceptual, external real and intrapersonal forms), and structure (Indicative basis: Knowledge and Operational Bases) of intellectual action;

- *Socio-historical stages of 'development' and 'production' of archetypes of the collective unconscious* in their relationship with the innovation process;

- *Subjects-'translators' of archetypes of the collective unconscious in the innovation process* in their relationship with psychosocial properties and varieties of archetypes of logos and myths;

- *Features of the relationship of the collective unconscious with the scientific*

and educational cognitive process; possible consequences for the effectiveness of the latter in the context of sustainable development of society.

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