"NEW ENLIGHTENMENT": NEW FRACTALITY IN TRANSFORMATION PROCESSES OF EDUCATION

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Annotation. The relevance of the research reflects the unity of the requirements of the Beijing Philosophical Congress "Learning to be a man" (2018) and the anniversary report of the "Rome Club" "Come On! Capitalism, myopia, population and destruction of the planet" (2018), which the transformation processes of the socio-sphere are revealed from the standpoint the need for a radical breakdown of the spiritual and moral world of man and his worldview. The foundation of these transformations is the transition in education, as the hippocrine of our knowledge, the source that quenches thirst in them to the "new Enlightenment" as a decisive factor in the learning of a person to be him. This determined the purpose and objectives of the article. The purpose of the article is to substantiate the natural and necessary character of the formation of the "new Enlightenment", to reveal the architectonics of its content.

Research objectives: in the context of the goal to uncover the factors that determine the need for a transition in education to the "new Enlightenment", its qualitative difference from the Enlightenment of the 17th-18th centuries; to characterize the new content of "connectedness" in education based on the use of new information technologies; analyze the process of formation of a new spiritual and moral outlook of a specialist on the universal values of humanity; focus the learner's attention on focusing knowledge of sustainable development as a determining factor of the global problems of mankind through the interrelation of academic disciplines; an important component presents the demand for the formation of a new integral thinking, innovative in its essence and qualitatively different from the analytical one. It is noted that the transition to the path of integral thinking contributes to the connection, coordination and organization into a single whole of the fragments of the object under study. Such thinking is characterized by stability, reliability, variability; it is original in its connections with science and education, and methodological influence on individual and social consciousness. Integral thinking reflects a qualitatively new level of intelligence.

Research methods: to achieve the stated goal and constructive solution of the tasks, the article used the method of abduction, analysis and synthesis, historical and logical, synergistic approach. The results of the research: a new paradigm of education is represented – the noospheric-information one corresponding to the factuality of the "new Enlightenment", as its ability to reproduce itself on a changing scale. The change in the scale of the socio-sphere is due to its globalization processes. The content of the "new Enlightenment" is explicated as a qualitatively new level of formation of students' sustainable knowledge based on the integral innovative type of thinking based on the information resources of society, the use of modern educational technologies, as well as on the values of society, as the quintessence of its wisdom and public intelligence. Conclusions.
Thus, the formation of a "new Enlightenment" is natural and necessary. This follows from the requirements of the "learn to be human" program, as well as from the development of an internally ordered education process. "New Enlightenment" also has an attribute of uniqueness, since it does not have anything to compare with, identify; it is an objective, essential, unique phenomenon; it is single, relative, determined by the previous development of education. It is based on the processes of intellectualization, innovation, informational content, humanism and is capable of solving constructively the tasks facing society.

**Keywords:** "new Enlightenment", education, factuality, paradigm, connectedness, integral thinking, values, stability, regularity, synergetics, abduction.

**Introduction.** The current stage in the development of philosophic knowledge is characterized by a special set of problems that together form its intellectual horizon. They include: the formation and development of the information society; the inconsistency of globalization processes, among which it is necessary to note global shifts in the economy, tectonic faults in the structure of the social sphere; crisis in the development of the spiritual sphere, in the decline of spiritual and moral foundations of individual’s worldview. Crisis phenomena spirituality today has a favorable effect on the formation of a bifurcation person (V. Shalaev, 20); generates information cynicism, as a way of life.

Without a constructive solution of the noted problems, the progressive development of all spheres of social activity is unthinkable. Concepts and models for the reorganization of modern social sphere offered a lot today. Among them: the ideas of V. Voronkova, A. Sosnina, V. Nikitenko, M. Maximenyuk, (3, 4); P. Vodopyanova, A. Zelenkova, C. Kirvel (18); N. Zhuravskaya, B. Kovalchuk (5); I. Kolyadko (eight); J. Neisbita (9); A. Lazarevich (10); E. Toffler (16, 17); A. Chumakova (19) and many others.

Gone in the annals of philosophical thought in 2018 was marked by two major events of world significance: the World XXIV Philosophical Congress "Learning to be a man" (Beijing, August 13-20) and the Commemorative Report of the Rome Club - "Come On! Capitalism, myopia, the population and the destruction of the planet." In this report, four tasks of transformational transformations of society are identified as determining: 1) on the basis of a critical analysis of economic relations under capitalism, the authors of the report note the need for a transition to an alternative economy; 2) indicate the process of forming a single planetary harmonious civilization and transition to it; 3) represent the idea of a “new Enlightenment”; 4) substantiate the need to form a new sustainable spiritual and moral outlook of a person.

The last three tasks are included in the area of philosophical research, since they are united by the idea of forming a person of a new civilization system. The foundation of a constructive solution of these problems is education. It appears as the hippocrene of our knowledge, the source that quenches thirst in them. And we can fully agree with the statement of F. Nansen that "as soon

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as the thirst for knowledge fades away in us, we cease to be human beings."

The purpose of the article is the substantiation of the natural and necessary character of the formation of the “new Enlightenment” as the foundation for resolving the existing social contradictions.

The objectives of the study are to represent the main components of the architectonics of the “new Enlightenment”: to characterize the new content of the “connectedness” in the educational process; analyze the process of formation of a new spiritual and moral outlook on the universal values of mankind; to focus the student’s attention on the concept of sustainable development through the interconnection of academic disciplines; form a new integrated thinking, innovative in its essence and qualitatively different from the analytical one.

Main body. Both of the above-mentioned unique documents are united by the idea of the formation of a man of a new civilization device. They predict its being and social essence; represent the goals and objectives, as well as kinks in the spiritual and moral rebirth.

What, then, is the new civilization device represented by the Club of Rome? This is a single planetary harmonious civilization. The idea is interesting, but it is somewhat utopian in nature. Today, in a global world in which the interests of the powerful countries of the world collide, there is more negative than positive. The contradictory, conflict-prone process of the formation of the global world aggravates all processes, without exception, not only of human existence - the social sphere, but also the essence of the trio sphere as a whole. “Global world, - notes A. Chumakov, - a set of natural and social systems that form the trio sphere - single whole, consisting of the geo-, bio- and sortosphere of the Earth”[19, p. 14].

On the one hand, architectonics of globalizing world, global shifts and tectonic faults in the social sphere of globalizing humanity can be distinguished. On the other hand, it can be argued that the modern information civilization has not yet revealed all its potential possibilities. "We have no idea about the possible magnitude of its no-sphere power ... In this respect; the most unexpected may be what is most expected" [21, p. 401]. Today it is difficult to predict the whole range of society’s expectations from the information type of a civilizational device, but it can be argued that this spectrum will be contradictory in its content; it will appear as a unity of positive and negative spheres in the development of human existence.

New philosophies in these documents, as noted above in 2018, focus their attention on the problem of a human. Turning philosophical thought to study the essence of the human on the twenty-first century is not a fundamental discovery for it. It is one of those "eternal" problems that permeate an intellectual horizon of philosophical knowledge, with a duty cycle of more than 27 centuries. None of the epochal stages of human development has ignored the study of the multidimensional nature and
essence of man, his qualities and properties. And it is clear that philosophy, like no other science, was and is responsible for an objective analysis of its essence, integrity and uniqueness. It is designed to minimize throughout the entire worldview array of fundamental ideas of anthropology, psychology, social sciences, introducing an element of orderliness in them.

An analysis of the material of the Beijing Philosophical Congress shows that they paid great attention to the conceptual model of “learning to be human”, and the report of the Rome Club focused on the need to move to a “new Enlightenment” clearly represented by an instrumental implementation model formulated by the philosophical Congress of the problem.

What prompted the authors of the “Club of Rome” report to the idea of a transition to a “new Enlightenment”, what is its necessity? First of all, in the radical transformation of the spiritual world of man and society, the formation of their new spiritual and moral outlook. Spirituality defines the measure of the quality of human existence, since it unites a person’s thought, knowledge, feeling and activity, characterizes the way in which its values, norms, goals and meanings exist and appears as an integrative quality.

However, spiritual culture today is described as being in crisis. “Causes of crises, - notes I. Kolyadko - associated with both objective and subjective factors. Objective factors are described due to the cyclical development of social systems, the needs of their modernization and restructuring; subjective ones are the result of mistakes and miscalculations in management, associated with an imperfection of mechanisms regulating innovative transformations, as well as with the untimely detection and diagnosis of crisis tendencies”[8, p. 89].

These causes of crisis characterize education as an integral part of global crisis in modern social sphere. This is happened due to, on the one hand, narrowly pragmatic attitudes of science, focused on achieving its practical results. In this case, the source of the crisis is seen in the development of a technical genetic civilization and automatically transfers it to the crisis of the intellect of the individual under a common guise - the anthropological crisis. “The anthropological crisis is an extremely acute perception of the crisis of modern man. It can be interpreted as multidimensional: as the problematic nature of a modern person being, the unpredictability and lack of guarantee of his fate, and as a threat to the survival of a person, undermining the foundations of his being” [18, p. 145].

To see a crisis of spirituality in the development of a technical genetic civilization, convergent technologies, means to pay tribute to a large element of technocracy. Today, the rapid development of computerization, informatization, space and military equipment and other areas of technical and technological progress with even greater force push their creator - man - into the “shadow”. But everyone
understands that these achievements are nothing but the “shadow” of his thinking, the result of the activity of his intellect, the realization of the plans of his spiritual perfection. “Man, - notes V. Stepin is not just a cell in the whole organism of society, and certainly not a cog in dynamic system of social relations. He is an active and only due to his activity society reproduced and changed like the whole organism. The main forms of human activity are activities, behavior and communication” [14, p. 102].

Crisis phenomena in social sphere, and particularly, in education, cannot be considered one-sidedly. The crisis is ambivalent; it is negative and positive unity. About this asserts and U. Thomas, who drew attention to the constructive function of the crisis in the process of social transformation and revealed its dual nature. “On the one hand, the crisis has a powerful destructive potential and can cause a dysfunction of a social phenomenon; on the other hand, it contains potential to become a stimulus for the further qualitative development of the social system, strengthening its immunity to the challenges of a global nature ” [15, p. 17]. From this point of view, it can be argued that the crisis contributes to the release of innovative potentials ripened in education, whose creative power is capable of constructively influencing the dynamics of its development.

Undoubtedly, an appeal to the study of the content of the future "new Enlightenment" is necessary. Education should develop at an accelerated pace compared to previously existing educational systems. At the same time, the educational system should be built in such a way that it was directed not only to the existence and development of the current generation, but also should focus on the long-term development of society, that is, education should be proactive, should be based on knowledge, which in the near future represented by fundamental sciences.

The range of methodological studies of the future "new Enlightenment" is quite extensive. Its essence and architectonics can be viewed from different angles.

First, as an abduction, “which is a stage of cognitive activity, consisting in forming conclusions based on empirical facts and preceding the nomination of the hypothesis explaining them” [2, p. 76].

Undoubtedly, the “new Enlightenment” appears in the progressive development of educational reality, as its new stage, which is being formed on the basis of the new paradigm of education that no longer responds to the previous paradigm and necessitated the representation of the new Enlightenment as more appropriate for the human civilization.

Secondly, the formation of the “new Enlightenment” can be viewed from the standpoint of advanced reflection. It applies to slowly developing transformations in the social sphere. Advanced education, as an integral part of advanced social reflection, is a methodological principle of searching for and proposing new ways of its development. Advance education is
education focused on modeling the future of civilization. It should not be reduced only to the analysis of the past and the present, but, above all, focus on the future, that is, should be anticipatory in nature.

Advance reflection is closely related to preadaptation, which, according to L. Keno, stands as possibility of new type’s emergence in new systems. Pre-adaptation gives the new system features of expediency and perfection. In TSB, it is represented as a property of the system, which has an adaptive value for not yet existing properties of interaction with the environment. It is also ahead of the design of new contours, properties and abilities of the new system and can be used in the design of the value systems of the “new Enlightenment”.

An important role in predicting the essence and content of the “new Enlightenment” is played by a synergistic approach, which opens up the possibility of choosing the main directions of education transformation. The synergetic paradigm in education in its past paradigms is characterized by the alternation of periods of their rise and fall. The global order expresses the state of rational understanding of the world, which is reflected in the knowledge of the fundamental laws of nature and society.

Synergetic as an interdisciplinary direction of scientific knowledge studies the patterns of evolution and self-organization of complex dynamic systems. Education appears in this hypostasis, it is also a special social fractal object, possessing internal laws of its development. “Fractal objects,” notes E. Knyazev, are objects that have the properties of self-similarity or scale invariance, i.e. such some fragments, the structures of which repeat on different scales ”[6, p. 221].

If we examine the factuality of the “new Enlightenment” from the standpoint of the initial thesis of synergetic from being, then this means a transition from the steady state of the old paradigm to forecasting the mechanisms for the emergence of the new. Factuality also means internal self-organization of education as having the properties of scale invariance. “Factuality ..., - notes V. Shalaev is the property of systems of different nature to correspond to its internal structure in situations of internal conversions ..., the property of the structure of any system to reproduce itself indefinitely on a changing scale ” [20, p. 357].

Analysis of education from the standpoint of factuality expresses its property to correspond to its inner nature in situations of transformations. Global transformations in education are changing its paradigms. This process also reflects the property of the educational system to reproduce itself indefinitely in changing conditions, on an expanding scale. For the “new Enlightenment”, in relation to the Enlightenment of the XVII – XVIII centuries, its meaning-proportional scale changes, and its reproduction is associated with the goals and values of a new type of civilizational structure. “Civilization is a stable systemic organization of social life, capable of long autonomous existence and self-

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development, possessing the space-time framework of its existence and acting as a specific information process occurring in collective activities” [11, p. 123].

The idea of a transition to the “new Enlightenment” is a special link in the architectonics of the transformational processes of educational reality. In general, the term "Enlightenment" was first used by D. Milton in his work "Lost Paradise". The ideas of education, formulated by F. Bacon, R. Descartes, T. Hobbes, D. Locke on the natural order and progress of social development, were supplemented in the 18th century by D. Voltaire, J. Diderot, J. Rousseau. All of them linked social progress with the growth of education and upbringing of citizens and were convinced that changes in morals are due to the development of culture, and it is determined by the development of reason. The enlightenment of this period solved the problem of harmonization of natural and social in the process of forming a person through physical, labor, moral and intellectual education. The concept of this Enlightenment clearly traced its class character, as well as its one-sidedness. It was an innovative theoretical construct, which did not reflect the instrumental model that solves the problem of a new technological civilization - the construction of an industrial society. The instrumental model of education for solving this problem was revealed by E. Toffler, seeing it in public education. He notes that “public education was the skillful mechanism that industrialization created to train the adult contingent needed for its needs. The task was extremely difficult. How to prepare children for a new world - a world of tense monotonous work in a room among the smoke, noise of mechanisms, to live in conditions of torsion, collective discipline, a world in which is not governed by moonlight or the solar cycle, but by a factory beep and clock. The solution was such an education system, which by its very structure reproduced this world” [16, p. 433]. Thanks to its form of education, an industrial society was built. This form of education realized itself in the USSR through RU, TU, FZO, vocational schools. Does such an education need a “new Enlightenment”? No doubt. But it was necessary to build an industrial society.

The “New Enlightenment”, like an Enlightenment of the 17th – 18th centuries, does not act as an education paradigm. It can be represented as an imperative of the future civilization. Even Enlightenment of the past centuries shaped its content in the form of classical universal education, as the ideal of that era. As for the new education paradigm, it can be represented as a no-sphere information one. In its quartet content, intellectual, innovative, informational and humanistic dimensions are merged together. It can be defined as “a qualitatively new level of formation of an innovative type of thinking of students, based on the information resources of society and promoting, on the basis of creative methodology and achievements of
modern science, the formation of a new level of individual and social intelligence” [12, p. 313].

Such a paradigm of education should form in a person those features and qualities that allow him to create values that correspond to the new stage of civilizational development. But for this, the education system should act positively, and not talk about actions: suggest prompting to gain knowledge as successfully as possible, and not talk about knowledge; to teach a person to love science, and not to talk about the love of science. In other words, education should be effective, not narrative. This is the requirement of tomorrow for no-sphere information education; it is the quintessence of the "new Enlightenment".

The “new Enlightenment”, as an educational imperative of the XXI century, accumulates a large positive solution to the problems of forming a spiritual and moral outlook, the foundations of the global concept of “learning to be a man”. These tasks are solved through the emancipation of the mind, through the scrapping of stereotypical linear thinking rooted in the consciousness of man and society, through the liberation of thinking from the shackles that bind our spirit. If we analyze the transformations in the educational system of modern China, it is clear that the country began with the process of freeing up thinking, the emancipation of the mind. “Emancipated consciousness,” notes J. and Dor. Nesbit means the ability to create your own role models ... Instead of turning to the West, the Chinese are increasingly looking for inner inspiration. China gains self-confidence and this confidence stimulate the development of creative potential” [9, p. 57]. The transition of “new Enlightenment” to the new paradigm of education should also be carried out on the foundation of civilized development and thinking emancipated, but “connected” together.

The formation of a “new Enlightenment” is natural and unique. The pattern, as the basic position of education, reflects its internally ordered character. It assumes regular repeatability in the content of its paradigms, methodological and social attitudes; the new should give an increment of innovations in these attitudes. The common in analyzing the formation paradigms of the past is quite easily detected, but it is necessary to take into account the statement developed by E. Toffler that “we cannot squeeze the embryonic world of tomorrow into the categories adopted yesterday. Orthodox attitudes or moods also do not fit this world” [17, p. 22]. Applied to “new Enlightenment”, this means that we cannot cram its new educational paradigm into the past tasks and methodologies.

“New Enlightenment” is not only natural, but also unique, because on the one hand, it is a form of connection between the previous and new paradigm of education, there is a process of denying the old quality through the formation of a new one, and on the other, the formation of this Enlightenment necessarily creates a unique, unique in its uniqueness beyond the specific laws of the

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preceding paradigm of education. Every unique, individual, contains a hierarchy of special features, unique features. “New Enlightenment” is unique because it does not have something to compare, identify, it contains the main element of difference. Uniqueness represents it as an essential, unique phenomenon containing an absolute moment of difference, it is natural, relative, uncertain, single, from which a new quality is born and positions itself as a form of connection of paradigms in education, determined by previous development, but does not fully fit into the scheme transformation of one paradigm to another.

Based on methodological setting of abduction and advanced reflection, let us make an attempt to express explicitly in the content of “new Enlightenment” what is implicit in it. From this point of view, “new Enlightenment” is a qualitatively new level of formation of students’ sustainable knowledge based on an integral, innovative type of thinking based on the information resources of society, the use of modern educational technologies, as well as the sodium’s value systems as the quintessence of its wisdom. Level of spiritual and moral outlook. This definition is closely intertwined with the settings of the no-sphere informational paradigm of education. The peculiarity of “new Enlightenment” is that the degree of effectiveness of acquired knowledge will be determined by an ability of the individual to adapt to the rapidly changing conditions of civilizational development. The authors of “new Enlightenment” concept see its fundamental transformation in the following. First of all, it should be based on “interconnection”, that is, relationships that express the essence of learning and contribute to strengthening ties between the subjects of the educational process, taking into account the positive of previous educational paradigms, qualitatively differing from them by the wide use of the latest informational educational technologies. Secondly, the formation of the “new Enlightenment” should be of a value nature, rooted in universal values, as the quintessence of human wisdom, in which there is something to learn how to be human. Thirdly, education should focus on sustainability; most of the knowledge today concerns environmental issues, but did not become part of the specialist’s general educational baggage. Sustainable development concerns the interconnectedness of all systems of the biosocial existence of mankind; therefore, the training of future generations should be based on new disciplines and revision of the content of old ones.

The fourth is future “new Enlightenment” system should make transition from widespread use both in science and in formation of analytical thinking to integral, cultivating its methodological value as a tool that ensures organic integrality through the ability of our thinking to perceive, organize, harmonize and unite individual fragments together to achieve a true understanding of the integrity of the investigated reality. Let us analyze these requirements put
forward to "new Enlightenment". First of all, "connection". To reduce it only to the interaction of subjects of educational reality is impossible.

To tell the truth, it is necessary to take into account that the knowledge of the subject being trained is formed only in the process of connection; therefore it is necessary to take care of its previous forms. Even Confucius argued that the one "who comprehends the new, cherishing the old, can be a teacher." Undoubtedly, "connectedness" reflects the process of interaction of subjects of educational reality, but the purposeful attitudes of society change and education is enriched only by knowledge of specialized disciplines, which subjectively narrows the ideological horizon". "Connection" requires the enrichment of this horizon through the innovations that form a new vision of the progressive future development of the society, through communication with intellectual support, through the introduction of new disciplines that meet the requirements and knowledge of the future specialist. "Connectedness" should reflect the need and ability of this specialist to combine individual achievements in various fields of knowledge to achieve the effectiveness of the task. So the Chinese model requires linking the knowledge of a specialist with solving social development problems. "Learn Japanese management, learn audacity from Koreans, Germans' thoroughness, marketing strategies from Americans - this is a rational Chinese peculiarity of forming a whole from components incompatible with the type" [9, p. 15]. This "connectedness" solves its main task - constructively linking and realizing the knowledge gained in education in practice.

"Connection" in the "new Enlightenment" should be based on the requirement of high-quality support for the innovative and advanced character of training specialists. It reveals the unity of innovation and "future implementations" in education. "Future implementations" presupposes the prediction of the main directions of the development of education, the development of methods for mastering the latest scientific knowledge, the latest programs that are difficult to integrate into educational practice. The “future implementations” of education for its “Connection” is very important because it reflects the transformation of education towards innovativeness. It contributes to the formation of advanced constructive critical thinking in students, as well as the shift of emphasis in the study of educational material from historical and theoretical to promising and practice-oriented forms of knowledge. The structure of the "Connection" of the future education must include modern information technologies that provide this process with tools. Information technology is based on advances in computer technology and communications. They reflect the processes of using a set of tools and methods of selection, information processing and data transfer. These technologies are a set of technical, software and organizational-economic
means, united structurally and fundamentally for solving one or another informatization task and aimed at improving the efficiency of the information object. In education, information technologies are not only a link in the “binding” of knowledge, but they allow achieving a high level of informatization for a student, this is a factor in the dynamics of the development of his personal knowledge. “New Enlightenment” should have a high value character, which is based on the core of human wisdom, its quintessence. Values in education should not just be maintained, but constantly multiplied. Knowledge is the greatest value of humanity and it is not for nothing that Confucius asserted that “knowledge is a treasure that follows those who possess it everywhere”. Guided by the wisdom of Confucius, China today forms and implements the concept of a learning society, because “in this country, learning is a fundamental element of everyday life, because everything changes so quickly and you need to learn new things” [9, p. 182]. Education is a key condition for building an innovative society. The value nature of education puts not just the task of laying the humanistic values of mankind in the consciousness of a specialist, so that they become the credo of his life, are sustainable, based on the requirements of society; so that the knowledge of a specialist focuses not only on the environmental problem, as the determining global problem of humanity, but also on others, which will also characterize the "Connection" of his thinking.

The requirements of the "Rome Club" to focus on the sustainable development of the planet reflect the concern of the authors of the report. In the conditions of the deepest world outlook crisis that has affected many countries of the world community, it is extremely important to restore reference points of the times, to substantiate on the basis of cultural traditions ways of solving life-long guidelines aimed at the survival of humanity. In this regard, there is a need to adapt the accumulated knowledge to changing technological and social innovations, and therefore there is a link between the educational level of society and its ability to take social and technological actions into account in its activities. Today we need to teach the specialist to “live together” with nature, S. Kurdyumov, that is, to join with nature in a new phase of co-evolution. “Coevolution,” he argued, “is the art of living in a single tempo-world, not curtailing, but supporting and developing diversity at the levels of individual elements and separate subsystems. So, it is necessary to cultivate in everyone a sense of responsibility for the whole in a pluralistic and unified world” [ed.: 7, p. 83]. Ignoring the idea of co-evolution today has led mankind to a sharp aggravation of the global environmental problem and its solution is possible only through the “Connection” of education, reflecting the interrelation of nature and society. “New Enlightenment” requires the formation and new integral thinking. Analytical thinking, viewing reality through the prism of the categories of mechanism, classical and non-
classical rationality, is unable to embrace its organic integrity. It is based on the study of elementary principles and principles, by virtue of which the reasoning takes on a value-based evidence-theoretical character, with respect to the essence of the problem under study. Today, it is necessary to switch to the rails of integral thinking, which requires combining, harmonizing and organizing into a single whole the fragments of the objects and processes of natural and social reality being studied. Such thinking is characterized by stability, reliability, variability, it expresses its specific essence, determined by the architectonics and the connection of the elements and properties of the object under study, must be exceptional, original in its connections with science and education, and also characterized by the irreproducibility of the methodological impact on individual and social consciousness. Integral thinking, reflecting a qualitatively new level of development of the student’s intellect, is most obviously manifested in the ability to find a way out of unusual situations, in the ability to adapt to a complex environment, in depth of understanding information.

**Conclusion.** The natural and unique character of the “new Enlightenment” is substantiated. Represented its development paradigm - the no-sphere information, highlighted its components. The content of the new education paradigm is explicated, the definition of the “new Enlightenment” is proposed for the first time. In the context of the goal, the determining components of the future Enlightenment are characterized: “Connection” in education; the value character of education, based on the treasury of human wisdom; focusing on the sustainable nature of the knowledge of the future specialist; cultivation of integral thinking, its content is justified.

**REFERENCE**

1. Beregovaya, O. A. and Kudashov, V. I. (2017). The globalization world and transformations of higher education. *The century of globalisation*, 4, 112-121.
2. Vodopyanov, P. A. and Burak, P. M. (2006). Philosophy and methodology of science. Minsk: *BSTU*, 128.
3. Voronkova? Valentina and Kvyliuk? Olga. Individual at the educational space of smart-society, *Interdisciplinary Studies of Complex Systems*, 2017, 10-11, 88-95.
4. Voronkova, V. H., Sosnin, A. V., Nikikenko, V. A. and Maximenyuk, M.Yu (2016). Philosophy of information and communication society: theoretical and methodological aspect. Zaporozhzhia: *ZSIA*, 276.
5. Zhurarska, N. and Kovalchuk, V. (2018). Globalisation as factor of influence on educational development. *Volume 3. London: United Kingdom*, 17, 235-246.
6. Knyaseva, E. N. and Kurduymov, S. P. (2010). The foundation of synergetics. Moscow: *LIBROKOM*, 256.
7. Knazyeva, E. N. (2011). Temporal architecture of complexity // Synergetic paradigm. Synergetics innovation complexityo. M.: *Progress-Tradition*, 66-86.
8. Kolyadko, I. N. (2018). The crisis in the processes of transformation of society: a socio-philosophical analysis. *Philosophical Studies*, 5. Minsk: *Belaruskaya Navuka*, 87-97.
9. Neisbit, J. and Dor. (2012), Chinas megatrends. Moscow: *Astrel*, 315.

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Філософія

10. Lazarevich, A. A. (2015). The formation of the information society. Minsk: Belaruskaya Navuka, 537.
11. Punchenko, O. P. (2013), Civilisation measuring of history of Humanity. Odessa: Astroprint, 2013, 448.
12. Punchenko, O. P. and Punchenko, N. O. (2017). Archeology of the noospheric education. Odessa: Drukarsky House, Druk Piveden, 452.
13. Starzhinsky, B. P. and Tsepkalo, V. V. (2016). On the way to the knowledge society. Minsk: RIVSH, 446.
14. Stepin, V. S. (2012). History and philosophy of science. M.: Academic project: Tricksta, 423.
15. Tomas, W. I. (1999). Course Book for Social Origins: Ethnological Materials, Psychological Standpoint, Classified and Annotated Bibliographies for the Interpretation of Savage Culture. Boston: Borham Press, 952.
16. Toffler, E. (2004). The shock of future. Moscow: AST, 557.
17. Toffler, E. (2004). The third wave. Moscow: AST, 781.
18. Philosophy and methodology of science (2012). Ed. prof. Ch. S. Kirvel. Minsk: Higher School, 639.
19. Chumakov, A. N. (2018). Global world: a clack of interest. Moscow: Prospect, 512.
20. Shalaev, V. P. (2009). Synergetics in the space of the philosophical problems of our time. Yoshkar-Ola: MSTU, 360.
21. Charden, P. T. de. (2002). The phenomenon of man. Moscow: AST, 553.
22. Alla, Cherep, Regina, Andriukaitiene and Olga, Venger. New theory of management as a factor in the formation of an ecologically balanced and socially-oriented economy in the conditions of Industry 4.0. Humanities Bulletin of Zaporizhze State Engineering Academy, 76, 230–242.
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необхідного становлення «нового Просвітництва», розкрити архітектоніку його змісту. 

Задачі дослідження: у контексті поставленої мети розкрити фактори, які обумовлюють необхідність переходу в освіті до «нового Просвітництва», його якісну відмінність від Просвітництва XVII–XVIII ст.; охарактеризувати нові зміст «пов’язаності» в освіті на основі використання нових інформаційних технологій; проаналізувати процес формування нового духовно-морального світогляду спеціаліста на універсальних цінностях людства; акцентувати увагу навчає мого на фокусовані знання стійкого розвитку, як детермініючого фактору глобальних проблем людства, через взаємозв'язок навчальних дисциплін; важливою складовою виступають вимоги формування нового інтегрального мислення, інноваційного за своєю сутністю та якісно відмінного від аналітичного. Зазначається, що переход на шлях інтегрального мислення сприяє з’єднанню, погодженню, організації в єдине ціле фрагментів досліджуваного об’єкта. Таке мислення характеризується стабільністю, варіативністю, воно оригінальне своїми зв’язками з наукою та освітою, методологічною дією на індивідуальну та суспільну свідомість. Інтегральне мислення відображає якісно новий рівень інтелекту.

Методи дослідження. Заради дослідження сформульованої мети та конструктивного вирішення поставлених задач, у статті використовуються метод абдукції, аналізу та синтезу, історичного та логічного, синергетичний підхід.

Результати дослідження. Репрезентовано нову парадигму освіти – ноосферо-інформаційну, відповідно фрактальності «нового Просвітництва», як його здібність відтворювати себе у змінюваному масштабі. Зміна масштабів соціосфери обумовлена її глобалізацій ними процесами. Експліковано зміст «нового Просвітництва» як якісно нового рівня формування стійких знань тих, хто навчається, на основі інтегрального, інноваційного типу мислення, які базуються на інформаційних ресурсах суспільства, використовуваних сучасних новітніх технологій, а також на ціннісних уявленнях соціуму, як квінтесенції його мудрості, яка сприяє становленню високого рівня індивідуального та суспільного інтелекту.

Висновки. Таким чином, становлення «нового Просвітництва» закономірне та необхідне. Це випливає з вимог програми «навчатися бути людиною», воно відображає розвиток внутрішньо упорядкованого процесу освіти. «Нове Просвітництво» є і атрибутивним параметром унікальності, оскільки його немає з чим порівняти, ототожнити; воно є об’єктивним, сутнісним, неповторним феноменом; воно оцінюючо, релативне, детерміноване попереднім розвитком освіти. Воно обґрунтовано на процесах інтелектуалізації, інноваційності, інформаційності, гуманістичності та може вирішувати задачі, які стоять перед суспільством.

Ключові слова: «нове Просвітництво», освіта, фрактальність, парадигма, пов’язанність, інтегральне мислення, цінності, стійкість, закономірність, синергетика, абдукція.

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"НОВОЕ ПРОСВЕЩЕНИЕ": НОВАЯ ФРАКТАЛЬНОСТЬ В ТРАНСФОРМАЦИОННЫХ ПРОЦЕССАХ ОБРАЗОВАНИЯ

Аннотация. Актуальность исследования отражает единство требований Пекинского философского Конгресса "Учиться быть человеком" (2018 г.) и Юбилейного доклада "Римского Клуба" "Come On! Капитализм, близорукость, население и разрушение планеты" (2018), в которых процессы трансформаций социосферы раскрываются с позиций необходимости коренной ломки духовно-нравственного мира человека, его мировоззрения. Фундаментом этих преобразований является переход в образовании, как впоследствии наших знаний, источнику, управляющему жажду в них, к "новому Просвещению", как решающему фактору научения человека быть им. Это определило цель и задачи статьи. Цель статьи заключается в обосновании закономерного и необходимого характера становления "нового Просвещения", раскрытии архитектоники его содержания. Задачи исследования: в контексте поставленной цели вскрыть факторы, обуславливающие необходимость перехода в образовании к "новому Просвещению", его качественное отличие от Просвещения XVII-XVIII ст.; охарактеризовать новое содержание "связанности" в образовании на основе использования новых информационных технологий; проанализировать процесс формирования нового духовно-нравственного мировоззрения специалиста на универсальных ценностях человечества; акцентировать внимание обучаемого на фокусировке знаний устойчивого развития, как детерминирующим факторе глобальных проблем человечества, через взаимосвязь учебных дисциплин; важной составляющей выступает требование формирования нового интегрального мышления, инновационного по своей сущности и качественно отличающегося от аналитического. Отмечается, что переход на путь интегрального мышления способствует соединению, согласованию, организации в единое целое фрагментов исследуемого объекта. Такое мышление характеризуется стабильностью, надежностью, вариативностью, оно оригинально своими связями с наукой и образованием, методологическим воздействием на индивидуальное и общественное сознание. Интегральное мышление отражает качественно новый уровень интеллекта. Методы исследования. Для достижения сформулированной цели и конструктивного решения поставленных задач, в статье использован метод абликации, анализа и синтеза, исторического и логического, синергетический подход.

Результаты исследования. Репрезентирована новая парадигма образования – ноосферно-информационная, соответствующая фрактальности "нового Просвещения", как его способности воспроизводить себя в изменяющемся масштабе. Изменение масштабов социосферы обусловлено ее глобализационными процессами. Эксплицировано содержание "нового Просвещения", как качественно нового уровня формирования устойчивых знаний обучаемых на основе интегрального инновационного типа мышления, базирующегося на информационных ресурсах общества, использовании современных образовательных технологий, а также на ценностных установках социума, как квинтэссенции его мудрости, способствующих становлению высокого уровня индивидуального и общественного интеллекта.

Выводы. Таким образом, становление "нового Просвещения" закономерно и необходимо. Это вытекает из требований программы "Учиться быть человеком", а также из развития внутренне упорядоченного процесса образования. "Новое Просвещение" обладает и атрибутивным параметром уникальности, поскольку его нет с чем сравнить, отождествить; оно есть объективный, сущностный, неповторимый феномен; оно единично, релативно, детерминировано предшествующим развитием образования. Оно основывается на процессах интеллектуализации, инновационности, информационности, гуманистичности и способно конструктивно решать стоящие перед

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обществом задачи.

**Ключевые слова**: "новое Просвещение", образование, фрактальность, парадигма, связанность, интегральное мышление, ценности, устойчивость, закономерность, синергетика, абдукция.

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"New enlightenment": new fractality in transformation processes of education

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