

ON THE BINARY AND TRINITY APPROACHES IN PHILOSOPHY, SCIENCE, THEOLOGY, ANTHROPOLOGY AND CULTURE.

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Abstract

There are presented the binary and trinity approaches in the human culture. They are rather popularly described even for the un-believers. Concretely they are described in philosophy, in science (physics), in religion studies, in the Christian theology, in anthropology (human studies), in the integrity of the human thinking. In concluding remarks it is said that the trinity principle is particularly well applicable for the alive systems and also for the social systems.

Key words: binary and trinity approaches, metaphysics and philosophy, science, Christian theology, anthropology, integrity of thinking.

1. Introduction.

Deep (abyssal) logic archetype in the European civilization, which is formalized in the Aristotle logics as a “law of the excluded third”, is the *binary approach*.

During the centuries of the scientific-technologic progress it was formed the especially analytical style of thinking. Analysis had become a synonym of the scientific research generally. It is beginning from the differentiation, collation, anti-thesis. The number of elements in the separate act can be different. The simplest variant is dichotomy, splitting onto two parts. So there appeared the binary oppositions, dyads. And such means had become dominating, general.

In the general use: *forward - backward, well - badly*. In the literature: “*Fathers and children*”, “*The war and peace*”, “*The crime and punishment*”. In philosophy: “*the subject - the object*”, “*the necessity - the luck*”, “*materialism - idealism*”. In this scheme the science is divided onto *natural and humanitarian, theoretical and experimental, fundamental and applied*. From there appeared also *problems of two camps, two cultures, two ideologies*.

However, if someone reminds the history, the binary-ism had dominated in the Europe not always. In the middle of the first millennium after Christ the example of the culture had served to non-separable, single-substance *Saint Trinity*. But the virus of the rationalization, coming from the Rome understanding of law, forced to think the truth as a document, and to this it is impeded the spirit, the presence of which made to be impossible the desirable generally binding nature of laws. And by the decision of Eighth Universal Synod in Konstantinopol in 869, the spirit as an autonomic element of the triple human being was been abolished by reducing it to the soul. The consequences of this decision are extended till our days, forming the horizon of the western mentality [1]. Continuing to have the faith in the Trinity God, we did also think in a binary way, dualistically, alternatively.

2. The binary and trinity approaches in the philosophy.

The creative thought did always revolt against the dominance of the dichotomy. But rather strong efforts were demanded in order to suppress the inclination, which was became to be habitual, to transform the differences into the irreconcilable oppositions. The binary-ism dictates the scheme “or...or”, by which there are formed the rules: “*who is not with us, that is against us*”, “*if the enemy is not surrender, he will be annihilated*”, “*the third is not given*” etc. The binary-ism is initially aggressive and therefore is increasingly dangerous. The ideology of the antagonism brings the world to the suicide. Besides that, the binary scheme, included in the usual stereotype by the centuries of analysis, became helpless in front of the problem of the synthesis.

The modern crisis has the global scale, seizing all the counties and all the spheres of life: economical, social, spiritual. And the binary science brings the necessary part of the responsibility for the sharpness of the experienced crisis, being able neither to predict, nor to resolve the imminent problems.

One of the directions in the establishment of another foundation in the modern science and practices is the trinity approach. In methodology of scientific thinking the idea of the probability of the “third” state of the object, born by the systematization of relations, is appeared. *The essence of the trinity approach consists in the considering of systems in the process of their becoming, i.e. in the completeness of their existence – non-existence and the probabilistic incarnation of their intermediate states and senses.* The simplest operation of the finding of their “structure”, i.e. the triple unity, in the result of which the system “triad” is originated: the complex of two connected and initially interacting elements and the multitude of their probabilities in mutual incarnations.

Dialectics as the theory and method of the reality cognition is realized by the Hegel scheme “Thesis-Antithesis-Synthesis”. The contradictions between thesis and antithesis, which “create” the progress in the form of the synthesis, are extremely fruitful and really are the moving force of any progress in the thinking [6].

The great philosophers-materialists prescribe to the nature the dialectic development, based on the struggle of the oppositions, which is peculiar rather for our mind due to its limitedness or to the process of the cognition but not the nature by itself. And establishment of the opposition appears only as a limited method of the research [6].

In the base of the trinity approach there is *the principle of triad* as the universal principle of the system structural property. On the topic of the trinity approach there is written the transformation of the system integrity into the system integrity, but not the transformation of the system elements into the system integrity [6].

The second important principle of the trinity-ism is *the principle of the becoming*, because the fact of the dynamic becoming of the triad and the system formations of itself subtend that in the base of becoming there are not the stable integral forms, but the transitional, intermediate ones. (This is especially typical for the developing living and social systems).

In the metaphysics and in the philosophy there were always present two approaches to the reality: the holism and the reductionism.

Holism is based on such understanding of the world when the whole dominates, precedes its parts. To the holism *the reductionism* is opposed, in which the whole is split by parts, which are understood as a more primary, precedent to the whole. These both approaches had the important significance and added to each other in the process of the cognition of the world.

Reductionism dominated (and is dominating now) in the development of the representations on the structure of the matter. It is sufficient to call the doctrine of the atomic-molecular structure of the matter, the

understanding of atoms in the form of nuclei, surrounded by the electron shells, the proton-neutron model of nuclei, the quark structure of the nucleons etc.

The holism can be seen in the works of the ancient thinkers, in the trends of R. Decart and other naturalists and philosophers of the new time to construct the monistic picture of the world.

3. The trinity principle in modern physics.

Since the modern physics was developed in the European Region, it is inherent for it the spirit of the reductionism. In the generally accepted physics there are studied the bodies (particles) which are situated in the space-time and interact each with other through the fields: gravitational, electromagnetic and others. This means that in the foundations of physics there are *three physical (more precisely, metaphysical) categories: space-time, particles (bodies) and fields-carriers of interactions.*

It is permitted to study the properties of space-time without matter, one can also consider the free electromagnetic and other fields (without the particles-sources). We assign all the theories with such understanding of the categories to *the trial physical (metaphysical) paradigm.*

General relativity theory and quantum theory, often called by two pillars of the theoretic physics of the 20-th century, appeared to be constructed on the principally different foundations.

In general relativity theory categories of space-time and of gravitational field are united, and in quantum theory categories of fields and particles are united. Such theories it is natural to call *the dualistic ones.* Having three versions of the unification of two categories from three, we obtain three types of physical theories (dualistic paradigms) or *three world explanations* of one and the same physical reality under different angles of view.

1. Let us name *the theoretic-field world-understanding* the version of the theories (metaphysical paradigms), based on the unification of categories of particles and fields. To these theories there are related quantum mechanics and quantum field theory, in which the (boson) fields of the interaction carriers and (fermion) fields of the particles are considered by symmetrical way. The apogee of this approach is based on the super-symmetric transformations between the fermion and boson wave functions, opened in the second half of 20-century. The same line is continued in the superstrings and brains, such fashionable at the very end of 20-century investigations.

2. Let us call *the geometrical world-understanding* the view on the physical reality on the base of categories of space-time and field-interaction carriers. The central idea does here belong to the Einstein general relativity theory. To the same class of theories there are related many-dimensional geometric models of physical interactions, which are called by the Kalutsa-Klein theories, where besides the gravitation are geometrized also other types of physical interactions, firstly electromagnetic one.

3. The view on physical reality with the positions of categories of space-time and particles we shall call by *the relational world-understanding.* To it, first of all, is related the theory of the direct inter-particle Fokker-Feinman interaction, based on the conception of the long-ranged action, which is alternative to the conventional conception of the short-ranged action, realized in the theory of field.

The main aim of the physicists-theoreticians is the construction of the physical picture of the world on the base unified generalized category. However they come to this aim from the various sides. And this unified whole is "seen" in a different way in every from such paradigms: the unified vacuum in the theoretical-field approach, the unified geometry in the geometric world-understanding or the unified system of relations (structure) in the relational world-understanding.

In the limits of the fundamental theoretic physics one can consider and formulate general principles of metaphysics which have the universal significance. Some of them are:

1. The principle of trinity is accepting the triple in the reduction approach and the three-unity in the holistic approach. In the fundamental theoretic physics this principle, in particular, is manifested in the forms of three dualistic physical paradigms.

2 The principle is *additional*, according the various dualistic metaphysic paradigm worldviews do not contradict but add to each other. This principle is the generalization of the known N.Bohr principle of the complementability, however now it relates non to two, but to three sides of reality. In the connection of this it is useful to remember the words from the lecture of one of the creators of quantum mechanics - M. Born. He argued the definition of metaphysics, given by B.Russell (“Metaphysics is the trying to comprehend the world as a whole with the help of the thought“), and wrote: “If has any something significance the epistemological lesson, instructed by physics, for the decision of this problem? I think so, because it indicates that even the limited regions the description of the system in the unique single picture is impossible. There are existing the *additional* images which simultaneously cannot be accepted, but which nevertheless do not contradict to each other and only jointly exhaust the whole. It is the very fruitful doctrine, and under the correct application it can make many acute controversies to be unnecessary not only in the philosophy but in all the regions of life” [5, p.208].

In the consideration of the various sections of theoretical and mathematical physics there are various manifestations of the principle of three-unity: in the reduction approach it is manifested of triple principle, and in the holistic approach it is manifested as the three-unity principle. We name the most significant manifestations of this principle:

1. The physical space has three dimensions.
2. Time is accepted one-dimensional however it is accepted to differ the past, the present, and the future, i.e. it is manifested the triple principle.
3. In the base of the modern cosmology there are three types the uniform isotropic cosmologic decisions of Einstein: the closed model (with the three-dimensional cross sections on the form of geometry of the Ryman), the opened plane model (with the geometry of the Euclid) and the opened model, the cross section of which is described by the geometry of Lobatchevsky.
4. In the physics of the micro-world there are three kinds of fundamental physical interactions: electromagnetic, weak and strong. Now there are investigated the possibilities of the unified-theory construction from these three kinds of physical interactions. And it is obtained a certain progress in the unification of electromagnetic and weak interactions in the form of the gauge model of electroweak interactions the Wainberg-Salam-Glashoy.
5. In the strong interactions, quarks as the elementary components of particles can posses one of three chromatic charges that brought to define the name of chromo-dynamics.
6. Barions, i.e. the particles, participating in the strong interactions, consist from three quarks, which it is impossible to select separately due to the propriety of the confinement.
7. In the classical physics, there are used three kinds the dimensional quantities: length (centimeter), time (second), mass (gram).
8. It is possible to call the manifestation of three-ism in the form of the widely known “golden proportion”, defined from relations of three intervals and also in the law of the construction of the Fibonacci or Luke series etc.
9. Here it follows also three kinds of dualistic physical (metaphysical) paradigms - theoretical-field, geometrical and relational ones.

This list link can be continued further. Similar manifestation of the triple principle can take place in the other ranges of science and culture.

4. Three principles and forms of philosophical-religion studies.

Formulated above principles of metaphysics had manifested also in others spheres of the world culture, in particular, it is possible to see them in the philosophy.

Analysis shows that in philosophic and in religion doctrines three metaphysics principles (categories) come in the form of the following systems of the related conceptions: (I) *ideal (rational) origin*, connected with mind, (M) *material origin* or being, given in the feelings, and (S) *spirit origin*, will, faith.

5. Tri-unity logics in the Christian theology.

Idea on the tri-unity of the world is one of the stable and diffused in the mythology and in the religion of practically all populations of the world. In Daoism it manifested in the form of trigram, in Hinduism it is the unity of Brahma, Shiva and Vishnu, there is a number of three-isms in the antic culture. The three-ism brightly expressed in the Christian dogma of the Saint Trinity. This key dogma of the Christianity was accepted on the second Universal meeting in IV sec.

How Trinity got in the Bibbia? Its roots went ...in the pagan philosophy. Dialectics in the form of double logic is clearly represented in the mountain predication: “*But let your communication be, Yea, yea; Nay, nay: for whatsoever is more than these comeyh of evil*” (Matthew, 5:37). Really, whole prototype of trinity in the Bible is absent, as well as it is absent also the convincing affirmation of it. Unlike the Bible, which is inspired by God, the idea of the construction of the study on Trinity belongs to the first priests and the first fathers of the church. The dogma on Trinity is the fruit of the Christology, and it can be considered hence not otherwise as in the connection with the doctrine on the historical personality of Christ, “as the result of the tendencies to find some new notion on God”, because the prophet “contents of the Christian doctrine is given in the revelation” [6]. Besides that, Divine Trinity relates to “the management of the main spheres of the surrounded world but not to the methods of its perceiving.

Thus, three-unity is the faith in that there are acting three Personalities in one God, and namely Trinity is the mystery which our limited mind cannot completely understand.

6. Anthropology: Human trinity

personalizes three origins, three dimensions, correlated between each other in the system (like the triangle). A man is three non-separately connected between themselves hypostasis: 1) animal, 2) social, 3) spiritual and reasonable (through the social-media).

Someone often says on three parts of the human being: they are its spirit, soul and body. Apostle Paul says: “*And the very God of peace sanctify you wholly; and I pray God your whole spirit and soul and body be preserved blameless unto the coming of our Lord Jesus Christ*” (I Thessalon., 5, 23). Spirit, soul and body are combined in a man by the hierarchical principle via three-unity logics in the Christian theology: spirit is the superior element, body is the lower element and soul is the intermediate element which realizes the mediation between spirit and body. Soul is directly connected with body and spirit is connected with body through soul.

7. To the integrity of the thinking on the base of trinity

The integrity of the thinking is an organic unity of the intuitive, emotive-image and the word-logic thinking.

The intuitive thinking is such form of thinking in which *the sense, conclusions are directly perceived and their obligatory character is felt* without reasoning and logic premises. The intuitive thinking is characterized by that there are no clearly defined stages. It is based usually on the convoluted perception of

the whole problem at once. A man reaches the answer, a little or at all not realizing that process, by means of which he was obtained it. As a rule, the intuitive thinking is based on the knowledge in the relevant region.

The emotive-image thinking is able to the momentary recreation of the image in the whole situation, of the evaluation of its significance. It is necessary for this the particular psychological mechanisms of the reality perception, which permits to gather information on the object into whole image, bypassing the missing connections. It is important here the role of the imagination, the intuition, the association connections.

The word-logic (conceptual) thinking is often called by the summit of the thinking human development. Utilizing this kind of thinking, a man can analyze, compare the phenomena, objects, situations, estimating the object, situation, phenomenon as from his own point of view, and also from other points of view. This kind of thinking moves from the partial to general and vice versa, i.e. a man utilizes the induction-deduction method of thinking. For it in the thinking the hierarchy is characteristic: namely the separation of the main, the subordination the secondary one to it. There are predominating the complex sentences in the discourse. It is manifested the sensitivity to the logic contradictions, and one can adequately understand the figurative sense.

8. Concluding remarks.

In the systematization of the knowledge, the trinity is the doctrine of the three-unity in the whole [6]. The trinity principle is particularly well applicable for the alive systems and also for the social systems. This principle had been investigated last years (in 1982-2011 and quite recently) totally in Russian literature.

References [all in Russian]

1. Свасьян, К.А., (2002) Становление европейской науки, Москва, 440 стр.
2. Моисеев, Н. Н., (1995) Современный рационализм, Москва, 376 стр.
- 3 Баранцев, Р.Г., (1989) Системная триада – структурная ячейка синтеза, в: Системные исследования. Ежегодник 1988, Москва, 193-210; (1982) Системная триада дефиниции, в: Международный форум по информации и документации, Москва, 7:1, 9-13; (2000) Универсальная семантика триадических структур в науке-искусстве-религии, в: Языки науки – языки искусства, Москва, 61-65;
(2001) Принцип неопределённости-дополнительности-совместности в тринитарной методологии, в: Прикладная философия и социология, Ульяновск, 2001, 48-50;
(2001) Научные труды РИМЭ, Рига, вып.5, 91-95;
(2008) Становление тринитарного мышления, в: «Академия Тринитаризма», Москва, Эл № 77-6567, публ.14882, 23.09.2008.
- 4 Владимирова, Ю.С., (2008) Основания физики, Москва: БИНОМ, Лаборатория знаний.
(2009) Метафизика, 2-е изд, Москва: БИНОМ, Лаборатория знаний;
(2010) Геометрофизика, 2-е изд. Москва: БИНОМ, Лаборатория знаний.
- 5 Раушенбах, Б.В., (2000) Логика троичности, в: Раушенбах, Борис, Пристрастие, Москва, изд-во «Аграф», 117–129.
6. Василенко, С.Л., Никитин, А.В., (2011) От диалектики к поли(а)ллектике и назад... в будущее, в: «Академия Тринитаризма», Москва, Эл № 77-6567, публ.16329, 01.02.2011.