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UNIVERSAL HOMEOSTASIS AND OTHER HYPOTHESIS

2003 - 2015

A collection of articles were published in a magazine: SENTENTIA. European Journal of Humanities and Social Sciences. – 2013,2014.

RECOMMENDATION LETTER

On our first meeting with Iskandar Kurbanovich Asadullayev that took place in 2008, after publication of his article about hypothesis on restriction of the principle of the mass and energy conservation, we were at some length discussing the border problems of the physics and philosophy. It was a time when he was actively developing and publishing new categories of the philosophy. As of today, there are about three dozens of such new categories reflected in his books.

New developments in the science not always immediately become a fact for all the scientific world, it takes years before it is accepted by the science in the whole.

What is the physical reality and the world around us in terms of the modern physics and in the context of the philosophy? Usually the physics investigates not what the reality is, but how it shows itself. That is how there are described laws governing our Universe. In the modern physics, objects are usually described by using the mathematical models. At that for each object, the mathematical models have the area of their applicability, parameters variation range when they give a well adequate description of the real object.

Asadullayev's ideas and hypotheses suggest existence of other Universes. It is impossible to discover them through definitions of our Universe. They cannot discover each other and they do not participate in the processes of each other. They exist and do not exist. However, they comply with the principle of the matter conservation and thus reveal themselves. Parallel worlds comply with the principle of the matter conservation. In this respect, the principle of the mass and energy conservation, $E = MC^2$, is theoretically limited.

He achieves such results through his discoveries in the field of the philosophy - the new categories, not yet known to the scientific world. The emptiness differs from the space, though they are basically different kinds of matter.

Articles suggested by Asadullayev I.K. represent an interesting point of view on this issue. At that, this point of view in many ways is closely related to the Avicenna's view of the world, of the Universe, of the reality and we can even assume that it is a generalization of this point of view.

The most outstanding achievements of the twentieth century –namely, the quantum mechanics and the relativity theory showed, that the physical reality surrounding us in micro and mega scales might radically differ from the pictures that have been created by the physics of preceding centuries based on the direct, intuitive considerations. In the XXI century we should expect the rapid progress in the physics, for example in the physics of high energies and elementary particles - replacement of point-type objects by extended ones – by superstrings and brans (M-theory), replacement of the extended space-time by the multi-dimensional fabric of space-time, consisting of nodes, loops and hidden, minimized (folded) dimensions. It seems that new and original philosophical ideas spelled out in Asadullaev's works could promote understanding and elaboration of new trends in development of the physics and astrophysics.

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THE EIGHT CHALLENGE OF MILLENNIUM? – PART 1.
EMPTINESS IS MATTER

The hypothesis of incompleteness of the principle of conservation of mass and energy

This article attempts to show incompleteness of the principle of conservation of mass and energy, on the basis of assumption of the recognition of two new for the science types of substance – being of proposition and being of perception, based on the fact that emptiness is not nothingness (nothing), but “something” – type of substance. During the work we intend to rely on some ideas and views already stated by the author, the logical continuation of which brings to a conclusion, indicated in the headline of the article [Asadullaev 2008, 10-20]. The hypothesis proceeds also from the mutual transition of different types of matter: substances, fields and spaces, into one another in strictly defined conditions.

We expect the recognition of emptiness as a type of matter to have far-reaching consequences for numerous sciences. Firstly, it “legalizes” in terms of

natural scientific materialism, i.e. attaches legitimacy to the ideas of mass and energy extinction. This, however, does not mean transition of something into nothing, and by expanding conservation principle, we uphold the same position that matter does not disappear, but converses from one type into another – emptiness. The recognition of emptiness by matter brings to the cardinal conclusions about the emergence of galaxies, black holes, stars and stellar substance from space (emptiness). The hypothesis of emergence of substance in the centre of galaxies receives another indirect confirmation. (In accordance with historical and philosophical tradition, coming from ancient times by space we mean emptiness, albeit now space is referred to as emptiness, since it possesses protensity, dimensions, geometric properties and so on, aka it is not nothing). Although René Descartes identifies matter and space, nevertheless, the approach of regarding space only as properties or forms of matter, but not as its type is preserved.

Methodological importance of this thesis is that one should not only upheld a certain principle $E = MC^2$, but advance in search of a more general principle of conservation, not limiting only by the principle of conservation of mass and energy; it is necessary to include into a future physical and mathematical formula and space as something, turning into another something – substance-field. Thus the thesis: “emptiness is matter” will attach some supplementations and clarify our views in astrophysics, physics, mathematics and philosophy. We expect that the given thesis will give impetus to further explorations of absolute vacuum structure, disputing its existence before Big Bang. As a form of matter associated with substance and the field, emptiness-space emerged at the same time with them.

While discussing this issue, the attention was drawn to the fact that the speed of light is the vector concept and the space, in this sense, is included in the formula $E = MC^2$. In this regard, the author of the article suggested the idea that included space should be taken within the aspect of structural changes that are asymmetrically adequate to mass and energy. Emptiness-space is something that

changes absorbing mass and energy. Essentially, the question is that it represents by itself something as space, qualitative changes of space – emptiness that is adequate to “disappearing” substance-field, transforming into the structural changes.

It is clear that the principle of conservation of mass and energy still functions well in many cases, but there are numerous related issues in the science, not limited with its effect that require new researches.

We are not talking about negation of the principle of conservation of matter but of its historical form, as a principle of conservation of mass and energy. The principle of conservation of mass and energy is just a constituent part of a more general principle of conservation of mass, energy and space (emptiness, absolute vacuum).

The principle of conservation was discovered in 1748 by M.V Lomonosov, and in general terms formulated by Lavoisier in 1789. Whatever is taken away from one body is added to another. At first, this principle was related to the conservation of matter and motion in chemical reactions. Henceforth, it became to be expressed through mass and energy equivalent to it, in nuclear transformations. In parallel, there has been a tradition of a broader understanding of the principle of conservation of matter and motion. Under matter, we mean all its forms and types: elementary particles, energy field. However, it is not completely clear in relation to the definition of the structure of matter itself.

The following below judgments extend the concept of matter, including the notion of emptiness (space) as a type of matter into it, and not only as its attribute, form, or property. That means that mass and energy (fields) may not be conserved exactly as this type of matter, but may transform into space – absolute vacuum, and vice versa. That can be understood as the disappearance of matter or the appearance of matter from "nothing". Although in reality nothing appears from nothing and does not transform into anything. The application of new concepts – being of proposition and being of perception leads to an expansion of the principle

of conservation of matter, including such type of it as emptiness-space. That is, the principle should cover not only matter and motion, but also space, into which the motion and other types of matter – substance and field are transformed. Nowadays, the physics has successfully developed the concept of absolute vacuum but not as nothingness. We need a consistent solution of the issue in a philosophical context. This may give the returning pulse to physics, mathematics and astrophysics.

Rene Descartes identified matter and space, assuming that emptiness does not exist, but it is important for us to distinguish types of matter that transform into each other, that is something that can be raised as an issue only today. Matter and space cannot be identical due to the fact that the space is a part of the matter.

In order to substantiate the ideas given in the title of the article, we will, in our turn, justify of the existence of philosophical categories – being of proposition and being of perception.

At the same time, the article attempts to reconsider more than two thousand years of philosophical tradition which in its precise and convex form and patterns identifies the emptiness and nothingness (nothing), if in some cases it recognizes the existence of emptiness not as matter, but as its container, forms of existence or attribute. This, to our mind, is a form of “shameful” belonging of the concept of emptiness (space) to the notion of matter, and a consequence of “substantial” approach to understanding of matter.

The history of philosophy has experienced other, sometimes contradictory approaches, to the concept of emptiness, but its relationship with the material being has not been recognized directly, but somehow shamefully in the form of “non-substantial”, as opposed to “dense” as “substantial”. Among ancient thinkers, only Leucippus and Democritus came close to understanding of the single essence of “substance” and emptiness. Here is what Aristotle writes in this regards: “A Leucippus and his follower Democritus recognize fullness and emptiness, calling one as substance, and another as non-substance, namely: full and consistent – substantial, and empty, and (sparse) - the non-substantial (and therefore they state

that substance exists no more than a non-substance, since a body exists no more than emptiness), and, by the material cause of existence, they mean both” [Aristotle, 1976 I, 75]. Moreover, Leucippus and Democritus did not essentially consider “density” and emptiness to be equivalents, although “body exists no more than emptiness”, they acknowledged the existence of nothingness, realizing it as emptiness.

Even Hegel, being deeply aware of the substantial unity of “a thing” and emptiness, assuming that each of them is dialectical negation of one another and “existent being”, nevertheless, was not entirely confident in assuming emptiness as nothingness. “In terms of negation “a thing” and emptiness are the point of the ratio of negation of the negation as the ratio of a certain alternative to a relative alternative, “a thing” is the negation in the definition of being, the emptiness - the negation in the definition of non-being” (Hegel Georg Wilhelm Friedrich. Science of Logic. Volume 1 / / Moscow: Thought, 1970 - p. 235).

Persian-Tajik physician and philosopher Abu Bakr Ar-Razi (the second half of IX - beginning of X century) also does not recognize emptiness as matter. The researchers of Ar-Razi’s works M. Dinorshoev and M. Mirboboev note: “It should be emphasized that Ar-Razi’s thesis on place as one of eternal inception of being, is a necessary logical consequence of his concept of place as the matter container” [Abu Bakr Ar-Razi, 1990, 8]. Being of "place" is recognized, but not as matter.

The survey of the current issue expands at the same time our views on the scope of universal dimensions of reality by introducing new philosophical concepts to the scientific use, reflecting, hopefully, a new category of philosophy – being of proposition and being of perception.

The thesis, laid down by the author on the basis of many years research of new philosophical categories, states: there is an infinite number of universal dimensions, laws and categories of objective reality, behind every single-unit phenomenon or object there are universal laws, phenomena and categories hidden, which are not always accessible at first sight, but should be identified within the

process of learning of reality. The “notorious” triad of universal dialectical laws, rooted in Hegel’s works and accepted by the Soviet philosophical school restricted entirely the possibility of a principled approach to this issue. Quantitative framework of philosophical categories are usually hushed up; there has only been one rescuing phrase “and other philosophic categories”. Let us try to confirm the above mentioned thesis on unrestrictedness of universal dimensions of reality once again, attracting for this purpose views of teachers of mankind, who are precursors of many modern ideas, whose brilliant insights lead us to the formulation of new problems of science.

The relationship between objects and their location was already noticed in ancient times. Let us analyze what Ibn Sina (Avicenna) writes in his book “Danishnama” in the section “Guidelines and instructions”. Ibn Sina asks himself on behalf of the reader's polemical question: “One may say: “The body cannot have either place, or state, or form emanating from its essence. On the contrary, perhaps, from the very inception of its emergence any certain body should be endowed with external factors by its Creator. The influence of these factors cannot be free, by its status and form, due to which it becomes to be definite, as it is displayed in every little particle of a land, a place of which corresponds to its nature and is opposed to the place of another particle due to the factor that does not underlie in its essence, albeit this does not happen without the assistance of essence. Despite the peculiarity of its state, the body does not separate from its appropriate certain natural place, though does not deserve this place in any absolute way. What we are talking about relates to the absolute place. The same can be said about form” [Abu Ali Ibn Sina (Avicenna) 2005 I, 690-691].

This stated doubt of Ibn Sina (Avicenna) is contrasted with the following opinion: “As for the Creator, he designed the essence of the body during the moment of its emergence for a certain place but not any other, only on the basis of the advisability of its nature or because of special necessity or by chance”. This thought reflects an exceptionally important principle in the cognition of the body

(things, objects, events) in its relation to the place. Essentially, this is a fundamental recognition of the substantial unity of body and space, or, as we would say today, being of proposition and being of perception. The question is not merely about the fundamental connection between matter and space as forms of its existence, it would be an absurd to repeat a well-known truth.

The question is about something else – it is about the challenge of setting the topical philosophic ideas free from ongoing “substantial” approach to the reality, both in modern materialism and other sciences. The solution of this question suggests us the ideas of the incompleteness of the principle of conservation of mass and energy. The new approach is, to our mind, extremely vital for modern physics, astrophysics and other sciences. Over the thousand years matter has primarily been understood, first of all, as a substance matter (body, body-like, “flesh”), and emptiness as a condition for the existence of this “flesh” - matter. Although at the time Leucippus and Democritus considered atom and emptiness as the elements and material factors of existing. However, as we noted above, despite this they regarded atom as to be substance and emptiness as non-substance.

Emptiness, in many other studies, has also been recognized as being, but “shamefully” - as a condition for existence of another being - matter, which has understood as substance (“flesh”). Matter, as we can suppose, is understood restrictedly in the form of matter only. These are different areas of philosophical thought with a vividly expressed “substantial” approach to matter.

How should it be understood? Let us refer to the works of the prominent thinker of the twentieth century Werner Heisenberg. In his article “Quantum Theory and the Origins of the Study of Atom” he writes: “Energy is the driving force. It is regarded as an ultimate cause of all changes and can be converted into matter, heat and light. The conflict of opposites, which is typical for Heraclitus’s philosophy, finds its prototype hereby in the interaction of different forms of energy” [Heisenberg 1990, 35-36].

In this aspect, Lenin's definition of matter through its opposition to consciousness represents a matter of exceptional significance. One may judge as much as one wishes, Lenin's political ideas and practice, but his definition of matter represents a major achievement of modern philosophy. Lenin gave a definition of matter, but he himself was not consistent in its application toward space that is also adhered to "substantial" understanding of matter.

The imperfection of the "substantial" approach becomes evident in the aspect of Lenin's definition of matter as an objective reality which is independent of consciousness. Under proposed Lenin's definition, matter is all that is beyond consciousness, moreover, consciousness and matter are absolutely opposed only within the fundamental question of philosophy. That means that beyond the fundamental question of philosophy the notion of consciousness is not opposed to the notion of matter and is a part of it. Matter is substance and energy, and all the other infinite forms of reality, not referring to consciousness as an alleged source of matter. This is a well-known statement of modern materialism, which has fundamental significance for further studies, confirmed by the practice and development of natural science.

However, Soviet philosophic tradition undergoes some lacks concerning the approach to the understanding of matter, when space is recognized only as a form of being of matter. This is also, to some extent, the development of "substantial" approach to matter as an objective reality. As we can say, today matter is considered as being of proposition (the term means something which is incurred in, proposed, occupying a place, to place).

It is beyond doubt that space is a form of being of matter, but we should not restrict ourselves by this statement only. The form itself, i.e. space, represents a certain type of matter. There is, to our mind, the being of proposition and being of perception, - the opposite manifestations and forms of matter. The concept of perception should be understood not only from anthropological point of view, but broader, in terms of ontology as something which is perceived as a type of matter

and material. At first superficial sight, the understanding of “emptiness”, space as an integral part of matter may seem absurd and paradoxical. But this follows from the consistent understanding of matter as an objective reality. The notion of being is used as identical to the notion of matter beyond the fundamental question of philosophy.

Being of proposition is all that takes a certain “place”, and the notion of “place” itself is being of perception – another type of matter. However, we should not, in our turn, limit dialectics of being of proposition and being of perception only to the notion of space and what is in the space.

We act on the premise that space is not just being of perception, but is also being of perception with a sharp qualitative drop in the aspect of comparison with the “substance-field”. In other words, there exist, at least two types of being of perception. One type is space as something which perceives and the other type is represented by “substantial matter”, that is “something” which is perceiving within the being of proposition itself. That means that being of proposition, remaining the same all the time and at the same time, becomes “something” perceived. Each “substantial matter” (substance, field, energy, and etc.) may be, in various but quite definite aspects, represented both with being of proposition and being of perception.

The dialectics of pan-sexuality of the world should be seen not only one-sided. At the human being level, for example, a woman, who makes the world a present of baby-child, in her turn, is being of proposition (ontologically “Yang” masculine), and a man who creates, together with the woman living conditions for a child, accepting it into his live, is, at the same time, a being of perception. As Vernadsky would say, “place for existence”, even though his concept refers to other biologic phenomena. Meanwhile, relationships between men and women are diverse, but the ones of their basics are universal parts of reality – proposition and perception. This serves as an argument for us to speak about the life of bisexual

organisms as a unique phenomenon in nature, in which, however, universality is displayed.

In other words, it is necessary to distinguish between being of proposition and perception in being of proposition of the universe itself, as objects, substances, energy fields that possess an ability to be not only something proposed, brought in, but also as a type of perceiving matter. Even in a simple communication with one another, one brings in, proposes, and the other perceives. The simplest interaction is not possible without these categories, since if things, while perceiving the effect of each other, do not change, there would be no interaction. As for the interaction - it is a universal form of being of matter. All types and forms of matter possess the ability of effect perception. However, the space is an entirely different type of perceiving matter. The “nothing” of the space is always “something”, regardless of the fact whether we would call it an absolute vacuum or emptiness. Space cannot only represent by itself the nothingness, as it also is the unity of nothing and something, however, in the form of being of perception.

Our approach to being as a unity of “Yang” and “Yin” is not something exceptionally new. In the intellectual history of mankind - the mythology and philosophy of ancient times were familiar with the ideas of enmity and love as the creative forces of reality, or, if we take, for instance, ancient Chinese mythology and natural philosophy with their ideas of masculine and feminine being – yang and yin. This serves as an evidence of the universalism of human cognition, reflecting the universality of objective reality. Universalism, that underlies the relationship between a man and a woman, affected the creative activity of the prominent poet and thinker Jaloliddin Rumi, who wrote the following lines:

Осмон марду замин зан дар хирад,

Хар чи он мекорад, ин мепарварад..

Suppose if a man is sky and a woman is earth

What the man sows the woman grows

However, yet at the dawn of philosophy it was Pythagoreans who long before Jaloliddin Rumi (the 800-year anniversary of whom was celebrated in 2007), mentioned masculine and feminine principles, alongside with other principles of being, this is what Aristotle indicates [Aristotle, 1976 I, 76].

The important thing for us, in this regard, is not the revival, but the understanding of the most original earliest ideas of mankind in the context of modern materialism, is freed from the mythology, poetic metaphors, and at the same time which is getting free from the heritage of “substantial” approach to the concept of matter. In this regard, it was Lenin who made a fundamental step introducing his definition of matter as an objective reality. However, the heritage of the Soviet philosophic tradition limits the ability of the approach toward understanding of space, not considering it as a peculiar type of matter itself, being of proposition opposite to other forms and types of it.

From this perspective, the “substantial matter and field”, – matter itself is a form of existence of space as being of perception. These are two types, two forms that do not exist apart. Here a question arises about the nature of time and motion (the other aspects of the continuum of Einstein), but it requires a special consideration.

Besides, after introducing such notions as being of proposition and being of perception into the scientific usage there appears a new dimension to the study of objective reality at the present level of scientific knowledge, and other aspects of interconnection of the history of philosophy, contemporary philosophy and other sciences. The recognition of the categories of being of proposition and being of

perception, and understanding of space as a type of matter consistently brings us to the hypothesis of incompleteness of mass and energy conservation principle.

The interconnection of body and “place”, which is found in works of Aristotle and Ibn Sina, is showed by the concept of continuum in contemporary physics (Lorentz and Einstein) on a completely different level, under which substance, energy, space and time represent a fundamental unity. However, it is necessary to take into account the structural and qualitative changes of emptiness (space, absolute vacuum) into which equal transformation of substance and field is possible.

From our point of view, the introduction of the notions of being of proposition and being of perception expands our insights of matter, space and the dialectics by new dimensions. In any case, this is in the midway of consistent understanding of Lenin’s definition of matter as an objective reality, which claims to understand space not only as a form of being of matter, but as a certain type of matter itself. From this perspective, the universe space represents an exceptionally peculiar by its quality being of perception, and all what is in it - being of proposition. The whole world together with the galaxies and metagalaxies, including the entire enlarging universe as being of proposition, finds itself in expanding “container” with which it is inseparably linked. In addition, if we take into account that the universe expands and the density of matter in it reduces to zero, one should, using a common anthropologic approach to this understanding, speak about a kind of weakening of its masculine. But at the same time, there takes place an intensification of being of proposition in the mankind evolution which creates a second nature – culture in the broadest sense of the word. A man in proposition contributes his own culture to the world.

And at the same time, humanity is a kind of growing being of perception in many directions. As an example we take the process of infinite studying of the universe, starting from the direct environment of a human being up to its visible limits, which is not restricted with time scope. The principle feature of being of

proposition and being of perception, which can be supposed as “proposition – substantial matter” and “perception – space-matter”, is relative resistance and conservation of their structures in such conditions where they essentially cannot exist apart. However, it has little to do with microcosm.

Alongside, it should be noted that space as a type of being of perception differs strikingly from another type of it – various representations of “substantial matter” as being of perception. There arise more and more questions, the answers to which, as we can expect, increase our knowledge. The absolute vacuum or “empty” space, which as we know is not “empty”, to our mind, gets filled with a deep philosophical meaning. Being of proposition and being of perception do not exist without each other. In this regard, it should be noted that even though absolute vacuum cannot exist apart from matter and energy fields, but at the same time, is not reduced to them, it is characterized by an independent “something”.

In addition, the problem acquires supplementary philosophical grounds in connection with the emerging aspects of the transformation of space as being of proposition into being of perception - another form, namely into the form of “substance-field”, infinite world of various types of “bodies” (atom, human kind, planets, etc.). That means that within the framework of specificity of space itself as a being of perception, there should exist or be generated other forms of being of proposition just exactly in the form of space. Since something happens within the framework of specificity of being of proposition – “substance field” which at the same time becomes being of perception. Within its specificity and quality, space experiences the alterations that we can identify as being of proposition of space itself which is beyond substance and field. Thus, the transformation of space as being of proposition into being of perception represents not only qualitative changes of space, but generation of substance-field by space.

Within the context of the problem defined the issue of the emergence of substance out of nothing becomes to seem differently. The transformation of “nothing” into something is indeed the transformation of one “something” into

another “something”: the emergence of being of proposition (“substance-field) out of space (being of perception or “perceptive matter”), that one type of matter causes another type of matter. If the space is being of perception that means it is not “nothing”, but something. And this something causes another something. As far as we can judge, our presented approach clarifies many confusing questions about the emergence of matter from nothing that perhaps does not occur, despite the claims of some philosophers and astrophysicists about the emergence of matter in “empty-nothing” space. However, in reality, one type of matter causes another type of it: space, matter and field mutually generate each other. The illusion of “emergence of matter out of nothing” and “transformation of matter into nothingness” is being overcome that has, as we think, special importance both for quantum theory and astrophysics. This is a cardinaly different dimension of the laws of interaction and mutual transformation of being of proposition and perception – “the substance-field” and space, “body” and its “place” speaking the language of pillar teachers. Each of them represents the essence of matter.

Henceforth, the great discovery in 1748 by outstanding Russian thinker and scholar Mikhail Lomonosov on conservation law has had extremely unexpected continuation and acquired new aspects. It says: whatever is taken away from one body is added to another. It is extremely interesting question the way how space, being as being of perception, becomes being of proposition, but not only as “substance-field” and remains as space.

This approach puts an end to the ancient intellectual traditions that divided the concept of matter and space, despite “shameful” recognition of belonging of notion of space to the notion of matter, although not considering “emptiness” or vacuum as a type of matter. In other words, emptiness was not included in the concept of matter as one of its types, but only as a “medium” of matter or attributive characteristic of matter. In the modern materialism, the space is still being defined as an attribute of matter. Attribute is a necessary, substantial, integral property of an object – matter in our case. However, according to this view, this is

not matter itself or one of its types, but only its property, even though being an essential one.

There is, to our opinion, a cardinal difference between the understanding of space as a property of matter and understanding of space (“emptiness”, “place”, absolute vacuum) as a type of matter itself. The statement of the question of being of proposition and being of perception is of methodological importance for further development of philosophy, physics, astrophysics and other sciences. Anyway, the aspect under dispute may provide an impetus to further scientific exploration and research, particularly for in-depth study of the emergence of stars and galaxies out of emptiness, large-scale transformation of space into the same large-scale cosmic being of proposition – “substance-field” (galaxies, stars , black holes, interstellar “matter”), and vice versa.

In this regard, the questions of the nature and fundamental properties of emptiness - space – as a type of matter transforming into a “substance-field” – in another type of it, come into existence. Relying upon all above mentioned, it should be noted that nothing is dual and in a way may represent something, not being determined by the definitions of our being – of our Universe. The Recognition of multiplicity of Universes gives us a clue of the idea that has been stated many times by scientists, about the enormous qualitative differences under the transition from one Universe to other ones.

We make certain once again that there is an infinite number of the universal aspects of the reality. Every single phenomenon in our case, represented by the relationships between men and women, conceals universality of the universe. The concepts of masculine “yang” and feminine “yin”, the recognition of the existence of categories of being of proposition and being of perception expand and deepen the principle of conservation of matter.

The principle of conservation takes another form, and most probably it would be a new physical and mathematical form. We are firmly certain of the

existence of such types of matter as being of proposition and being of perception. These categories supply with information the hypothesis of large-scale reciprocal transformations of space, matter and field. They “assume” the emergence of galaxies, stars, black holes, elementary particles, in “non-traditional way”, however, undoubtedly, as we reiterate, in strictly defined, regular conditions. It is necessary to display the way the hypothesis and other facts supporting the conservation principle in prior form fit well into each other.

2007

Bibliography

1. Asadullaev I.K. Beauty, Love and Perpetual motion. 16 new categories: based on the works by Aristotle, Avicenna, Hegel. Dushanbe: Irfon, 2008;
2. Aristotle. Works in four volumes. , 1976;
3. Abu Bakr Al-Razi. Spiritual Medicine / Preface. Dushanbe: Irfon, 1990;
4. Abu Ali Ibn Sina (Avicenna) Works. Dushanbe: Donish, 2005;
5. Hegel Georg Wilhelm Friedrich. Science of Logic. Volume 1 / / Moscow: Thought, 1970 - p. 235
6. Heisenberg W. Physics and Philosophy. Part and whole: Translation from German. Moscow: Nauka, 1990.
7. Aristotle. Works in four volumes. Moscow: Mysl, 1976

EIGHTH CHALLENGE OF THE MILLENNIUM? – PART 2.

“Exhalation” of Black Holes as Transition from Light Matter into Conditions of Non-Participation of Dark Matter

(On the new philosophical categories of participation and non-participation)

The idea of multiplicity of worlds and universes has already existed for decades in physics, astrophysics, mathematics and philosophy: mathematical calculations have been made, the theory of an assembly of universes progresses, and in philosophy and religion these ideas have existed since ancient times. But if these universes exist, why are they silent, and why is their behavior still unobserved, except by keen scholars so far limited to hypotheses, estimates and propositions? However, everything new must begin with a hypothesis, from which one can develop fully provable new scientific inquiries.

Moreover, today cosmology is experiencing a genuine revolution in relation to fundamental changes in how we perceive our universe. Ninety-five percent of our universe consists of invisible “dark substance and dark energy” whose physical behavior cannot be observed and remains unknown¹.

Which is the case: the non-existence of “dark substance and dark energy,” or it is just its non-participation in the processes in our light Universe? The question of existence and non-existence originated alongside religion and philosophy and has been addressed in various ways. The meaning of existence and non-existence are interlinked to each other, opposing one another. Our task is not to give the historical background of how different scientists and systems have understood them, but instead to draw attention to the objectivity of their relationship. This approach yields wholly surprising aspects.

We proceed from that point of view that non-existence of our world exists as an existence and certainty of another world, universe or “substance.” This paper is the continuation of the published article, “The Eighth Challenge of the Millennium? Is

¹ Internet source: Rubakova V. “Temnaya energiya” (Dark energy) Interview, Senior Research Fellow, Nuclear Research Institute Russian Academy of Sciences, Moscow

Emptiness Matter? Hypothesis on the Incompleteness of the Principle of Conservation of Mass and Energy,” in the Journal “Sentence,” № 1, 2013.

In that previous article, emptiness (space) was considered as a state of substance within which other substances are transformed – matter and field. In turn, matter and field form from the emptiness (energy).

In the present paper, we consider matter and field (the micro world, macro world and mega world) as existence in our world. Non-existence in our world is existence in another world, for example, “dark matter and dark energy.” This means that, possibly, the “exhalation” of black holes is a transition of existence and certainty of our light Universe into non-existence in the form of non-participation. However, this non-existence is a form of existence of “dark matter and dark energy” which do not participate in the processes of “light matter.” There is a “window” of interaction in the form of gravitation between light matter and dark matter. However, it is possible that there is another “window” – the transformation of the matter-field of the light Universe into non-existence, that is, the existence of dark matter and dark energy. Dark matter is a state of non-participation with light matter – that is, with our light Universe. And vice-versa. The existence of “dark matter and dark energy,” which are non-existence in our world, transform into existence in our light universe by birth of a matter-field of emptiness. This means that through the “exhalation” of black holes there is a permanent shrinking of the density of light matter, which at the same time increases the emergence of light matters/ matter-field in the center of the galaxy or through other means. We hope that this can be observed in light matter – that is, in our Universe. The mass and energy of our light universe are both growing and shrinking simultaneously. We hope that this can be observed through scientific observation.

Meanwhile, the dialectic of the categories of existence and non-existence (non-existence is a category) is quite diverse, as confirms by the works of philosophers.

For example, in Hegel's research, for whom existence and nothingness are inseparable in many aspects. However, speaking of Hegel, it is important to distinguish the two sides of these contradictions: as internal contradictions, and also as divided by space and time. We are interested on second aspect, though in principle we do not divide it from the first. We should mention right away that we are tentatively talking about time and space, as they are the essence of certainty in our universe, though it is quite possible that they do not exist in other universes. However, "dark matter and dark energy" exists in space in our Universe. It is necessary to mention more broadly that this refers to the difference between existence and non-existence in the determination of different universes, but also in one distinction of our world. All "matter" in the Universe has its own distinction: the distinction of "dark matter and dark energy" cardinally differs from the distinction of light "matter" in our light Universe. There are two "matters" in our Universe, which do not participate in mutual processes – except gravitation.

On aspects of the correlation of existence and non-existence, it should be said that nothingness as non-existence is a denial a certain existence, that is, nothingness is not an abstract denial of an abstract existence, but a concrete correlation one of with other. Only in this case, as paradoxically it may seem, nothingness really exists. We may not speak in general, but only in a concrete and certain aspect.

However, the problem of non-existence in objective reality is settled in aspect of the concrete certain correlation existence and non-existence one to other only. It can be understood as follows: there is such a thing as existence, and there is such a thing as non-existence of this thing. This relates to matter: there is the existence of matter and there is the non-existence of matter, but there is no general non-existence. That is why, to jump ahead, the non-existence of one thing is the essence of the non-existence of another thing, which was already foreseen by Aristotle. Non-existence entails the real existence the denial of something's existence. That is, we can speak only about existence and its denial in with respect to the concrete

determination of something's existence or non-existence. In this distinction, nothingness, entailing the existence of nothing existence of nothing, is non-existence. Non-existence exists, but in a form of denial of a concrete certain existence, the existence of a concrete certain thing in the form of existence of another thing.

In other words, non-existence exists, there is the existence of non-existence, but only in respect of a concrete denying correlation regarding a particular thing.

Non-existence, the denial of a certain existence, becomes the existence of nothingness – a particular non-existence. It is particularly important in respect to the correlation of the existence and non-existence of multiple universes do not see one another as a result of the radical or absolute difference in qualities between one another. Scientists have written much about this particular divide between worlds.²

The attempts of astrophysics and mathematicians to reveal the distinctness of “dark matter and dark energy” through means within our light universe (i.e. experiments, research, astrophysical observations) has not yet yielded results. In other words, it is not “yet” possible to detect dark matter and energy, as they do not enter into contact with light matter. There is only a “window” of interaction of “dark matter” and “light matter,” and that is gravitation. This “window” of interaction will “expand” for scientists if there is success in determining the specific distinctiveness of black matter and energy.

Each Universe different from every other universe and cannot be defined by definitions of another existence.

² See.: Universe, astronomy, philosophy (Wselennaya, astronomiya, filosofiya) // Izdatelstwo MGU, 1988.

If we adhere to modern hypotheses on the existence of “dark matter and dark energy” that fill 95% of our universe, then this “dark matter and dark energy” is nothingness for our light matter, as there is no interaction or participation in its processes, with the only exception of existing “windows” – gravitation and perhaps something else that has not been identified. That is, it is possible there are other “windows,” for example, through the exhalation of black holes and the emergence of light matter in the center of the galaxy. Or there are other means, as yet unknown to us.

In our point of view, there are dialectical categories in philosophy, and they could assist in understanding the aspects under consideration: the categories of participation and non-participation. The dark universe and light universe, with the exception of “windows,” do not participate in processes of one another. That is what is currently posited by scientists. Dark matter is not detected by the means of qualitative distinction within the light universe (the scientific method, research, experiments, observations).

However, the categories of participation and non-participation covers not only light and dark matter in general, but can be seen everywhere. Things interacting with one another, i.e. participating in the process of each other, do not participate in these processes in the same way in certain aspects when creating new processes.

There is incomplete influence of one object over the other. An influence cannot be totally unlimited, how diverse it may seem, will nonetheless always be limited, leaving certain processes without unaffected. For example, when two metal balls mechanically collide at low speed they will be deformed and will change speed, but one does not change the quality of metal in the other. Alternately, two particles collide. During a collision, a quantum or particle may appear, but their distinctness of belonging to the micro world remains. There is incompleteness in any interaction, therefore there is always a degree of non-participation in processes.

All things include the categories of participation and non-participation.

But non-participation is itself a dialectic influence, when not influencing and not interacting to any object, a non-participating object allows the other to move and develop with its own logic or the logic of interaction with others.

The unity of concrete world is manifested in the existence of things: every thing exists in the distinctness of this world's existence, but all this of this world is at essence nothingness (non-existence) as distinguished by another Universe. Hence, we can conclude that our world and others, if they exist, have their own specific distinctness. Other worlds at present do not make themselves known, which means that they are not within the distinctness of our world. Alternatively, our world does not exist in the distinctness other universes, which are in turn non-existent in our world. The universes do not participate in the processes of one another, possibly with the rare exception of “windows” of limited interaction. Hence it is fully possible that we do not exist for anyone else or other universes. Existence is manifested in that it is seen by distinctness of own's world existence, within one's own Universe.

Here we have paradox of “silence,” of non-participation of universes with each other, or at least with our world, although theoretically it is possible that the number in existence is unlimited. There are other similar paradoxes. There is also the *astrosociological* paradox, understood as the contradiction between admitting a multiplicity of inhabited worlds and the absence of the real manifestation of activities of alien intelligence (внеземные цивилизации)³. This relates to the non-participation with regard to interaction between possibly existing inhabited worlds. The same can be said of the “silence” paradox, or non-participation with regard to

³ Gindilis L.M. (Multiplicity of inhabited worlds) *Mnojestwennost obitaemykh mirov // Wselennaya, astronomiya, filisophiya*. Izdatelstwo MGU, 1988. – p. 93.

interaction of multiple universes. The non-participation paradox of our universe and others in mutual processes could be called as such.

This paradox came into being on the basis of universes' non-participation in mutual processes by virtue of the fact that they are not defined by distinctness of each other, being for each other nothingness – non-existent. Although, maybe, this relation of existence and non-existence only relates to our Universe, and other universes may have no “silence” with regard to each other; this is unknown to us.

To be a phenomenon within this Universe means to be in unity with its distinctness – as manifestation and part of its distinctness. Every thing in this world is in interaction with other things, and in contact and out of contact. This is the general participation all things with each other – in the processes of one another. Distinctness of this world in all its unlimited diverse manifestations, is only in this way, not any other way, another distinctness may be nothingness, the non-existence this world. The unity of this distinctness consist in that every thing, every object of this world may come into contact with any other thing. However, there is a manifestation of a hard category of necessity: there cannot be a self-will in relations between objects.

In other words, each Universe, dark matter and light, has its own distinction in transitioning the radical divide between them. Dark and light matters have “windows” of interaction, however there may not be such windows between different universes and they to one another nothingness – not-existence.

That is why we, our world, our Universe present a non-existence for others' distinctness – distinctness of other worlds for whom we are nothingness (non-existence).

Aristotle draws an attention to character of nothing – non-existence. He writes:

“This [question] raises considerable difficulties, as the reason for the continuing occurrence, if it can indeed be annihilated, disappears, becoming a non-being and a non-being is nothingness. After all, non-being is neither [a specific] object, nor a quality, nor quantity, nor a place. If things keep disappearing from existence, then why does the Universe still exist, instead of disappearing without a trace, if that which makes up each thing is perishable. But origin does not end not because of its continuity, but certainly because what is made of.” And Aristotle arrives at the notion, that, “And not because of transformation [of one object into another] must be continuous, is destruction of one thing the birth of another, and origin of one is the destruction of another object? This is how we understand the reason for all, equally [explaining] origin and annihilation of any thing»⁴.

The most important thought of Aristotle, in our view, is that that nothingness – non-existence – is not defined by distinctness of this existence – there is “neither quality, nor quantity, nor a place.” However the disappearance of one existence is the existence of nothingness, and that is the existence of something. That is, Aristotle arrives at the conclusion that nothingness is another existence. If this principle is applicable to the whole universe, then it should be said that nothingness of one universe is an existence of another universe that is not recognized by the first. The nothingness of one existence is another existence; it is a state of non-participation. But it is only one aspect, as there is a dialectical unity of existence and nothingness, what Hegel calls “formation.” Meanwhile, within the unity of existence and nothingness, Hegel demonstrates dialectical participation in the process of formation. It is worth also acknowledging this aspect in the correlation between existence and nothingness, but already in the dialectical participation in one distinctness of one world only.

⁴ Aristotle. (Essays) Sochineniya w chetyrekh tomakh. Moskva: «Mysl», Book III, 1981. – p 391.

There are two kinds of non-participation: non-participation in the divide between existence and nothingness, in our case, of the universes, and non-participation with participation with objects within one universe, in which case non-participation is not complete.

Moreover, non-participation is manifested in our world on a larger scale than meets the eye. For example, non-participation of objects within the present. In actuality, we interact with each other not at the present, but with the past of each of us. The light of a far galaxy takes billions of years to reach us. We perceive its past with our eye, our sense, but it is our interaction today with the state of galaxy as it was billions years ago. We do not know what's happening there now. There are billions of years between us. Nevertheless, this example demonstrates a principle: things do not interact with each other now, but with in their past, no matter how close it may seem to us. This is true even if it is a vanishingly short period of time. In this small amount of time, two objects are in a state of non-participation.

That is, if we assume the existence of the present time for all objects, then none of them can interact with one another object at the same time, and at present time they do not participate in processes of one another. In other words, due to the impossibility of instantly influencing one another, during this delay they do not exist for one another. It is this non-existence of things and infinitely small period of time that we call the present.

At the same time it should be said that, aside from the nonparticipation of interacting objects in the present, an interaction can always be seen as an interaction between the present and the past. For example, consider two boxers. A fight is taking place in real time. But at every moment in time there is a present moment where action takes place in quite a short period of time between the present of one and the past of the other. Every interaction is a link between the past influence of one object and the present of the other. A boxer, upon receiving a blow, supposes that it is happening in the present time but nevertheless, is actually

receiving a blow from the past with a small time delay to the present. This is readily evident when interacting objects are separated by significant time and distance, for example, in the interaction with a distant galaxy described above.

But in this case, too, without a single wave of present time, the present exists locally, and it is locally that interacting objects experience their state of non-participation. This is a distinctive nonexistence of objects for each other in the present. That is, the world is united and divided. The world is united as an interaction of one's past with another's present. The world is divided by the impossibility of interaction of objects within their present time.

The philosophical categories of participation and nonparticipation relate to ontology, social philosophy, politics etc., as they are universal. We meet these categories everywhere. There is participation or nonparticipation in every issue and problem, non-participation in political movements or participation and so on. For instance, nonparticipation for whatever reason of an individual in the activities of many organisations and institutions, nonparticipation in criminal cases, or participation at the fate of one's own people and country.

The categories of participation and nonparticipation are manifested in every interaction, and this issue is open-ended for philosophy and other sciences, with important methodological implications.

Our light Universe's "window" of interaction with dark matter and dark energy is one matter. But if we examine the "silence" paradox – nonparticipation of a multiplicity of universes with regard to our Universe – then this paradox can be explained by the existence-nonexistence dialectic with respect to concrete certain relativity – i.e., the impossibility of finding them within the distinctness of our Universe for whom we may be might be nothing – non-existence.

In addition, it is possible there is a hypothesis: “exhalation” of black holes occurs through the transformation of light matter (substance and field) into “dark matter and dark energy” as a manifestation of the dialectic of the categories of participation and non-participation. The reverse also occurs, as “dark matter and dark energy” transition to substance and field.

Bibliography

1. Internet source: Rubakova V., “Temnaya energiya” (Dark energy) (Interview, Senior Research Fellow Valery Rybakov, Nuclear Research Institute Russian Academy of Sciences, Moscow.)
2. “The Universe, Astronomy, Philosophy,” Moscow State University Press, 1988.
3. Gindilis L.M., “Multiplicity of inhabited worlds” (Mnojestvennost obitaemykh mirov) in “The Universe, Astronomy, Philosophy,” Moscow State University Press, 1988., p. 93.
4. Aristotle. (Essays) “Compositions in Four Volumes,” Moscow, Mysl Press, Book III, 1981. P. 391
5. Assadullaev I. “The Eight Challenge of the Millennium? Is Emptiness Matter? Hypothesis on the Incompleteness of the Principle of Conservation of Mass and Energy” // «Sentence», № 1, 2013.
2007

Abstract

You cannot see a fact without an idea. New categories of philosophy discover new fundamental sides of the physical world and of the Universe. We will give consideration to only two options. Six categories are important for us: being of proposition and being of perception, categories of participation and non-participation, as well as the fact that not-being in one world is a being of another world. It is an aspect of the marginal problem of the philosophy and of the fundamental physics. Being of proposition it is all that takes a certain "place" and

this very "place" is the being of perception - a different kind of matter. In one case, a substance, the field and space is the being of proposition, and emptiness is the being of perception. The space and emptiness are not congruent. Emptiness is a fundamentally different form of the matter, we do not consider it as a being yet. We attempted to show the boundedness of the principle of conservation of the mass and energy, proceeding from recognition of two new forms of matter – the being of proposition and the being of perception. The methodological significance is in that we should not simply adhere to the known principle $E = MC^2$, but move to the general principle of conservation of matter, going beyond the principle of conservation of the mass and energy. The principle of conservation should also cover the visible Universe, as well as the dark matter and energy (option 1). It is necessary to include the space itself into the physical and mathematical formula: $E = MC^2$ and the space – form the one side, and emptiness from the other side as principally different being of the matter. All this is the matter. The thesis: "emptiness – it is matter" will supplement and clarify our views in astrophysics, physics, mathematics and philosophy. Another option (option 2) concerns the limits of our Universe – the substance and field are the being of proposition and the space – the being of perception. The space is something, i.e. it is a form of the being of perception. The matter and field can pass into this form and vice versa.

For centuries, the emptiness was considered a not-being (nothingness). However, it is not-being (nothingness) for our world. Actually, emptiness at the same time is the being of another world, for example, the being of the dark matter and of the dark energy. Two worlds – of the light and of the dark matter - do not participate in each other's processes, do not interact (with rare exceptions). Nonparticipation is not-being. The light Universe and the dark matter and energy do not exist for each other (except for gravitation and, possibly, except for black holes). Not-being in one world at the same time is the being of another world. There are drastic qualitative variations between them. The principle of conservation takes another

form, and probably, the future new physical-mathematical form. Categories of the being of proposition and the being of perception foster the hypothesis about large-scale mutual transitions of emptiness, space, matter and field. Production of galaxies, stars, black holes in a "non-traditional way" is anticipated as well as "evaporation" of black holes and galaxies and others. Of course, strictly naturally. It is necessary to show how this hypothesis and the principle of conservation in the previous form fit into each other.

Emptiness, like the space, is the form of matter, the substance and the field are other forms of the matter. In our opinion, they can transform into each other. Bearing in mind the existence of different worlds, it should be said that, with rare exceptions, they do not discover each other: the matter is torn to parts not defined by each other. Parallel worlds are not discovered by each other, each of them has an inconsistent certainty. A great number of worlds as a whole do not interact with each other, they are as a whole out of contact. The visible Universe has its physical certainty that is incompatible with certainty of other worlds, they do not interact, do not participate in each other's processes and do not exist for each other.

NEW PHYSICAL PICTURE OF THE WORLD? - PART 1. Redshift galaxies should fluctuate. Universal homeostasis. The absurdity of the basic question of philosophy

"Universal homeostasis (new physical picture of the world? Absurdity of the fundamental question of philosophy)": WAC Journal "Philosophy and Culture» № 7, 2010. Institute of Philosophy of Russian Academy of Sciences. Internet:

[http://www.centrasia.ru/newsA.php? St = 12425 31780](http://www.centrasia.ru/newsA.php?St=1242531780), Sociology Department, Moscow State University: «Pitirim Sorokin Foundation.»

Vacuum wave, "Harmonious vibrations of the universe from Pythagoras to the present day" ⁵, fluctuations of micro-and macrocosm, mega world are the logic of the universal homeostasis, which we'll show below. The key to identifying universal homeostasis is a decisive shift to a completely new philosophy - New materialism⁶, most important idea of which is the recognition of the ideal as an attribute of matter along with the material. Ideal and material are attributes of matter. Our Milky Way galaxy is constantly in motion, "Being a spiral, it is rotating around its centre. But scientists have discovered that Milky Way also makes slight vibrations perpendicular to the platitude of the galaxy resembling a giant flag in the wind". Scientists claim the search for the reasons not yet found for vibrations of the galaxy: "At the moment, it remains unclear as to the causes of such motions. Among the possible causes there is perturbation of spiral arms of the galaxy and ripples arising from the passage of smaller galaxies through ours." Scientific discovery is made by "a group of international scientists led by Mary Williams of Potsdam Astrophysical Institute. «Experts watched nearly half a million stars around the Sun in the experiment on measuring the radial velocities (RAVE), as well as built 3D-models that showed those complex motions of stars. They helped to observe vibrations of the Galaxy that occur in several directions creating chaotic waves⁷."

The proposed in this article approach hopefully is an attempt for an essential complement of new physical and philosophical picture of the world, and above all,

⁵ Boris Berry. Special to The Epoch Times. www.epochtimes.com.ua. Berry B.L. Harmonic model of motion of solar system and Helio-geophysical processes of reconstruction and forecasts. 2011 [http://geoberry.ru/garmoni4eskie% 20modeli.html](http://geoberry.ru/garmoni4eskie%20modeli.html); Berry BL Helio-geophysical and other processes, their oscillation periods and forecasts. // Geophysical processes and the Biosphere. And 2010. T. 9, № 4. Pp. 21-66. [http://geoberry.ru/geofizi4eskie% 20procesy.html](http://geoberry.ru/geofizi4eskie%20procesy.html)

⁶ Asadullaev I.K. New Materialism // E-journal «Problems of Society and Politic» PAH № 2, 2013.

⁷www.gismeteo.ru/news/sobytiya/nasha-galaktika-kolebletsya-slovno-flag/

astrophysical. The key to it is recognition of ideal as an attribute of matter as well as material.

At the same time they are two inseparably associated sides of the objective reality. Ideal and material organically united and opposed. We'll try to show such an approach, based on the extension of homeostasis concept. Let's introduce the concept of a universal homeostasis.

Theory and concept of homeostasis evolved, especially in medicine, particularly in physiology and biology in general as a dynamic balance of the body. Claude Bernard in mid XIX then Walter Bradford Cannon in XX century set forth the problem of dynamic stability of living organisms, W. Cannon proposed the right term homeostasis.

This article proposes to consider homeostasis as a universal phenomenon. For this purpose, first of all, let's take a look at some examples. For example, it should be noted there is no perfect, straight or curved in real nature. Real objects in their motion along straight line always experience vibration influenced by the environment that is due to association of the object with other objects and internal motions. A soccer ball in a flight never make an ideal curve although we can imagine this curve more or less perfect free of ball's vibrations, and so on. This is the logic of movement, free from consideration of many minor deviations. And this is the logic of material, it is ideal. Ball having experienced some fluctuations, vibrations, yet retains its perfect curve that these vibrations appear around. Our hypothesis is that absolutely all the things or objects in their movements are unique, experiencing vibrations, however they have their ideal positions they keep returning to through deviating them, not completely clashing. In other words, every movement is unique, unrepeatable, but this uniqueness has its own logic, and the logic is perfect, essential, natural. This applies to planet Earth, the Sun, galaxies and so on, which are subject to the principle of homeostasis.

Homeostasis as a dynamic equilibrium is always a deviation- comeback. All the items and objects, moving from one bias sometimes in opposite direction, return to their ideal positions again and again. Ideal stability is non-existent; there is only a dynamic balance – sustainability in motion. But not materially, materially balance is essence of bias - return. The equilibrium point is ideal. Most likely, the issue at hand affects unstable systems of Ilya Prigogine, but significantly broadens and deepens the problem of unstable systems. After all, the concept of the wave properties is a crosscutting issue for microcosm and macrocosm and the megacosm.

Ideal is what exists objectively rather than materially. That there is an objective, but not financially. The ideal is objective, however it does exist in a subjective form.

In other words, in motion all the things possess ideal positions, in which the real trajectory of the object is the same only in general. It is an emanation of a movement that does not fit into ideal framework. Dynamic balance is no peace but a movement of material, which is only generally, coincides with the ideal position. Imagine a pendulum that swinging fails to be materially at all the spatial points of its swing. That's what makes it a moving pendulum, only all its movements in general make it a pendulum. All his movements as a whole are the logic of the pendulum. This is only possible ideally. This is its essence, it's perfect. Past of the subjects, as well as their future are ideal, they are not a determinate being. Determinate being is always exact in time and space. Let's recall the famous lyrics: "There is only a moment between the past and the future and only that is called life." We would say it is a determinate being and only it.

The past is contained in present as an image as a determinate being. As an uncoiling, the past can only exist in our minds as an ideal, but objectively the past exists outside of us as an actual being filmed in present. At the same time, the future of any object does not exist as an existence. In determinate being the future

of all things is ideal. This future is always there, but it is not material. Since determinate being of future is non-existent. Determinate being is material.

In particular, there is a problem of correlation of determinate being and essence. Material is always presented as an existence, but its essence is ideal not in the sense of idealism but objective ideal. Ideal in the universe has existed since its inception, continues its development on the level of life and producing human. And always inseparable from the material. The ideal is not an existence, but in our case it is the essence of material, ideal only while "nondeterminate ". And always inseparable from the material. The ideal is not an existence, but in our case it is the essence of the material, ideal by only "possessing " this "nondeterminate». The essence of things is immaterial, but doesn't exist without material. Objective reality is a unity of material and ideal. The essence of material is ideal due to the fact that does not reveal itself as an existence. Essence is ideal, phenomenon is material. It is, however, one aspect. For example, there is the phenomenon in mind and due to that the ideal occurrence of consciousness is another aspect to material - ideal ratio.

The proposed idea of ideal as an attribute of matter will change all traditionally treated philosophical systems and therefore is a key to philosophy and other sciences. There is a new system of philosophy emerging to be developed in-depth and it claims greater objectivity and truth.

The ideal in homeostasis covers entire state of material as a whole, concur and fails to concur with it. Trajectory of the ball is always an irregular curve with extremely many invisible to the eye vibrations and deviations - returns, but ideally its a regular curve that is the main path of the ball with the latter being as objective as the first, they only concur with as a whole.

All items are in real movement, which generally concurs with ideal position "levelling off" real trajectories. But it's mechanics. In physics, we assume it is the same. There is a real movement, infinitely rich with uniqueness, but as a whole concurring with ideal positions - with own logic.

However, one should count for the fact that ideal trajectory or positions sought by the objects in the universal homeostasis are not just the fact of consciousness of a cognizer, but are objective that is as real.

It should be noted that ideal and material ratio concerned is initially inherent in matter and attributive.

At this point we make a small detour to concentrate on the objectivity of consciousness, that is the ideal, which «levels off “ the world reflection in this infinite world in terms of their knowledge and concepts, distracted and unable to embrace entire variety. Consciousness, no matter how advanced it may be, can not cover all of the infinite variety of reality, but even through grasping the logic of development of things, consciousness is always poorer than the reality, and so it is in a certain sense "levelling off" of the material. They often talk about the mind in indefinite terms. However, it does exist in mankind, production and people as carriers of the ideal. For each individual his consciousness is subjective, but consciousness of another person is an objective reality - objective subjectivity. That is, when we state consciousness is a subjective image of the objective world, it, say the least, is a stretch. Essentially, consciousness is as objectively as it is subjective. As objectivity the consciousness is involved in the homeostasis – both as an ideal position and as a deviation - return (vibration).

That is, we have two sides of objective reality: the objective reality of the ideal position and oscillating around it the reality of "inrectified", that can be both consciousness with its carrier, and the socium. Every item that always exists in relationship to other items is inherent in oscillation, deviation and homeostatic return to the ideal position (state, trajectory or point). Existing in universal relationship to other things, each item is subject to oscillation and deviations in its main line or position. Meanwhile, the item is not always in the mainstream position, but it is her main position, it is objective. Effect of another item is increasing and decreasing during movement of objects, defining its deviation -

return. That is an item can be not in an ideal position, but it is objectively perfectly there, as it is constantly sought by deviations- comebacks.

Mathematics while researching material reality, "levels off" its rich diversity, reducing it to a simpler but significant. Therefore, ideal positions are reflected primarily by mathematics and geometry in the context of physics, physics is more inclined to repel the unique reality of the object with all its variations and oscillations. Physics while admitting mistakes and often distracting from them, always explicitly refer to the existence of these inaccuracies and mostly with math's help. At the same time, physics through reflecting rules of the universe, discovers the ideal. Laws, the essence of items is ideal and detectable as an existence in unity with material. Meanwhile, there is no need to perceive the material as a "lifeless" inception, which comes to life when exposed to the ideal as an alleged special active substance. Material and ideal are inseparable, their unity alone displays activity and movement.

Mathematical description of the phenomenon, if adequate to reality, is objective as an objective ideal. It fits a great diversity into abundance of the simple but significant. The ideal is an ideal because no math can cover all the infinite richness of reality, but snatches her logic. It «straightens» it. At the same time, mathematics can be adequate to the reality based on above reasons. The same is performed by human's logic. It relates to logical – historical ratio during cognition however in a different aspect. Logical is as adequate to reality as historical in the cognition process. Only logic is a rectified historical. Both objectively reflect reality or seek to do so. We take the case of adequacy to the world of both the logical and historical.

If we turn to Galilean principle of relativity, it is expressed as follows: "In the cabin of a ship moving steadily with no rocking, either by any phenomenon around or any event happening to you there is no way to know whether the ship is standing still or in motion." Universal principle of homeostasis denies the legitimacy of Galileo's principle due to the fact that every item moves uniquely thus inimitable in

the process of deviations and comebacks to the ideal position. Deviations-returns may be invisible in some cases while in other cases too noticeable, such as overcoming global crisis while maintaining capitalism. The material constantly crosses the ideal through its vacillations. However, ideal positions are as objective and they exactly can be synchronized. Absolute synchronization of objects as the actual being, e.g. materially, does not exist. Absolute synchronicity can exist supersensually. In other words, one and the same object is in two dimensions at one time: the material and the ideal. The same applies to the universal homeostasis and "ubiquitous" capabilities, without which there is no reality.

From the perspective of universal homeostasis, not a single item moves in unison with another object, every item has a unique, unrepeatable motion. They can only match in motion ideally. So initially contradiction was inherent in matter - the unity of opposites. Things can move simultaneously, but in the objective and ideal aspect of the ideal - in terms of the rectified motion. And at the same time there is no synchronicity. In other words, while dealing with rectilinear motion of system of items on inertia, the synchronicity exists as synchronicity of ideal positions, but not of real unrectified real motions that are unique and due to their uniqueness not matching.

The issue concerned is not confined to the problem of relations of matter and consciousness. Marxism and especially E.V. Ilyenkov, humanized the ideal, considering it exists only because of the existence of a generating body – mankind.

If you acknowledge existence of a universal homeostasis as one of the universal sides of the matter while the ideal as its attribute in this sense, you need to acknowledge the ideal and the material inhering in matter, the two that is - the ideal and the material that is one whole, that do not exist without one another yet not generate one another.

It is absurd to assume the matter is the product of an attribute or attribute is a product of the matter inherent to it originally. Therefore, fundamental question of

philosophy appears to be absurd: what comes first - matter or consciousness? Consciousness is the ideal that at the stage of a man is similar to certain living organisms, frightening opponents with their increased body parts. Comparison, of course, is very conditional and not entirely successful. No need to go far and beyond to find a proof. Lets take PyotrKuzmichAnokhin' theory on advance reflection as a fundamental property of life and consciousness. His theory describes this property as a property of living organisms and plants. And this is the greatest discovery of Soviet Russian scientist. However, from our perspective, this fundamental property of all the matter that occurs in inanimate nature as well, it acquires a "terribly increased" shape (to put it better, extremely advanced form) in living organisms and especially in man. In other words, living organisms and humans have everything fundamental for the entire nature evolved in an unusually mature and new form, in full details.

If P.K. Anokhin associated the effects of anticipatory reflection with life, his scientific discovery, while the ideas he expressed are consistently applied, covers an inanimate nature as well and it is true for all things. For example, dialectic of possibility and reality we began our presentation above. It's about the opportunity that is ahead of reality. When we deal with the possibilities, one of which becomes a reality, it means anticipatory reflection of reality. In every object, capacities it confines represent advanced reality that substantiates one of the possibilities. This fundamental property is unfolded into anticipatory reflection of life at the level of human and life in general. Since possibility is not an available existence so it cannot be material - as one material in another material. New vulgar materialists can «indulge» it. Possibility as available being does not exist; it is ideal in the material, objective and one with it.

Similar behaviour is with such a category as expansion similarity, which is inherent in all matter. However, at the level of a human it acquires new quality development. For example, in genetics, heredity, in what seems to be the most unusual aspects: religion, ideology, etc.

Consciousness is a high quality and extremely rich development of the ideal at a human level, the ideal that exists in the universe since its inception as an attribute of matter, as an objective attribute, along with the material. Unity of the world is not only about material world; it is also about ideal world. Ideality of the world in a human dimension is an objective-subjective form of the objectively existent ideal. This is not the Absolute Spirit Hegel with his otherness in nature. It is not Hegel's Absolute Spirit with his otherness in nature. There is a "spirit" and nature, enclosed in a single matter. But it is not a self-tension "spirit", detached from the matter and material. In this sense, the ideal is not a "spirit" and cannot be it. This unity of ideal and material is as objective unity of the world. Active substance is also in motion through the unity of its attributes. At the level of mankind the ideal is becoming both a subjective reality without ceasing to be an objective reality. They are two sides of universality - universal homeostasis.

In such judgments there is no pantheism in its new form, as a category of the material is an extremely broad concept. And we are behind the concept of new materialism.

At the same time one should not treat it as a new form of Descartes's dualism. The ideal by Descartes is subjectivity, parallel matter. In this aspect, however, it's a single substance with its objective attributes - the material and the ideal. It is not a split between matter and spirit, but rather a unity of opposing attributes of a single matter. The ideal beyond life is not a "living spirit" of the matter. Those who are called idealists treat the ideal as a special being, however "spirit" of nature is not an available existence. For them, the spirit appears as a self-tension substance. But this is not true; the material is as attributive as the ideal. At the same time human consciousness acts as objective-subjective reality while the ideal is not fully consistent with the concept of consciousness, it is broader in scope, including entire history of universe in this aspect. By Spinoza, the mind is omnipresent, but this is wrong: mind is the highest form of the ideal; it is the ideal that's omnipresent as an attribute of the matter.

Mankind and human activity is human homeostasis. One form of the ideal is consciousness with its goal-setting activities seeking to implement these goals. But it's a complex dialectic of purposes, of conscious and subconscious, as explicit and implicit needs that are often not the same as human activities and its results. A man, societies nominate ideal goals that activities unfold around. Objective laws form purposefulness. Hegel in his own way indicated homeostatic phenomena observed in a person, who wants one thing, but gets another and called it an irony of history. But this is a very special area of universal homeostasis.

Our proposed point of view has a new way to interpret the problem raised by medieval scholastics. Its about realists and nominalists. The trouble with realists was that they treated the general as an available existence. From our perspective, the general, the essence exists objectively as the ideal, but not as an available existence - non-material. Nominalists considered that general is a fact of consciousness and denied it an objective existence. The real problem, which medieval scholastics fail to resolve, is solved with the recognition of the ideal as an attribute of the matter. It brings clarity to many other physical and philosophical systems.

Some conclusions

Figuratively speaking, the Universe thanks to the universal homeostasis expands and quakes as a jelly. And the farther away the galaxy moves, the greater the rate of expansion and the stronger oscillations. Any real movement - inertial or accelerated - is uniformly uneven (material - ideal). The farther away a galaxy the greater is the amplitude of oscillation of both transverse and longitudinal. Longitudinal oscillations of flying galaxies occur in acceleration waves: now more expedited departure, now slower acceleration. In a sense it is similar to jerks. In our opinion, one can double check through oscillations (colour) of the redshift (colour) of Doppler effect. We believe it will be available for practical science. We could rely on the idea that every universal law of the Universe was there since

its inception. Therefore, science faces the problem of detecting redshift oscillations.

Rapidly receding galaxies oscillate around a receding ideal point of balance. Galaxies are tangible as an available existence and present an uneven acceleration flying away from one other. Consequently, one can assume that balanced ideal oscillation points obey some global law of uniform accelerating of ideal motion of galaxies. Hence the conclusion: Doppler effect should be addressed in the context of steady-unsteady motion – redshift oscillations.

Bibliography

1. Boris Berry. Especially to The Epoch Times. www.epochtimes.com.ua. Berry BL Harmonic model of motion of the solar system and solar-geophysical processes of reconstruction and forecasts. 2011 <http://geoberry.ru/garmoni4eskie%20modeli.html>; Berry B.L. Helio-geophysical and other processes, their oscillation periods and forecasts. // Geophysical processes and the Biosphere. 2010. T. 9, № 4. Pp. 21-66; <http://geoberry.ru/geofizi4eskie%20procesy.html>
2. Asadullayev I.K. New materialism // Electronic Journal "Problems of society and politics" RAS number 2, 2013.
3. www.gismeteo.ru/news/sobytiya/nasha-galaktika-kolebletsya-slovno-flag/
4. Aristotle. Works in four volumes / Volume 3, Moscow: Mysl, 1981.
5. Ilyenkov E.V. «Dialectical concept» // Politizdat, 1984.
6. Asadullaev I.K. Beauty, Love and Perpetual motion. 16 new categories: based on the works by Aristotle, Avicenna, and Hegel. Dushanbe: Irfon, 2008;
7. Aristotle. Works in four volumes. Moscow: Mysl, 1976

8. Abu Bakr Al-Razi. *Spiritual Medicine / Preface*. Dushanbe: Irfon, 1990;
9. Abu Ali IbnSina (Avicenna) *Works*. Dushanbe: Donish, 2005;
10. Hegel Georg Wilhelm Friedrich. *Science of Logic. Volume 1 / / Moscow: Mysl, 1970*
11. Heisenberg W. *Physics and Philosophy. Part and whole: Translation from German*. Moscow: Nauka, 1990.

Expansion of similarity as a category of philosophy,

Universal Law and

Universal Form of Matter in Motion

The concept of expansion of similarity as a category of philosophy reflects one very important aspect of the universal connection of the objective reality and universality of the world in its originality. Quoting Osiep Mandelstam, "Kinky order" of the world around us is subject to a fundamental connection of phenomena in their variety and movement of this diversity through its "multiplication", replication and assertion of diverse uniformity as far as this dialectic allows. Qualitative stability of phenomena, items and subjects is a movement of uniformity of this certain diversity in time and space - one of the parts of expansion of similarity as a universal law of reality.

Movement of uniformity is one of the most important forms of motion of the matter, contrary to its other form - permanent generation of innovations, diversity and differences. Uniformity movement has at least three "sleeves": expansion of similarity, reflected as a universal property of matter and invariability, interpreted philosophically as preservation of uniformity in various systems, transitions and levels.

There is a fundamental law of life, reflecting essential desire of phenomena to create systems similar to itself or continue own similarity.

In science, much has been done by scientists in exploring the similarity of phenomena, the relations of identity and difference, replication and difference. But in this aspect of motion of similarity, as unfolding in space and time and in a variety of scope and depth, the concept of similarity expansion is undoubtedly to find a mathematical, astrophysical, in other word, natural science aspects including identification of specific laws and relations.

However, this issue highlights the society and its every diverse phenomenon from a new angle. Exploration of the concept of expansion of similarity with necessity brings about ever-new challenges and aspects, the answers to which will be located by scientists engaged in this science novation.

The concept of expansion of similarity more fully reveals essential aspects of a democratic process, and identifies characteristics of extremism and fundamentalism, in other words, its "bloody mutation", regardless of their political color. Democracy, humanism allow expansion of similarity yet in the same way reserve the right to decline any similarity expansion if it is contrary to the will and dignity of the individual, party, people and not when humane laws must be obeyed.

Expansion of similarity does not act by itself, but rather as a result of intolerance of some phenomena to the otherness of other phenomena.

We are aware of anthropomorphism as applied to the term of «intolerance», which is gone as soon as we enter the realm of social motions.

Undoubtedly, it is the expansion of similarity (indeed within its specificity) that lays the ground for anthropomorphism, which simlizes a man with the world of plants and animals, endowing animated and inanimate nature, celestial bodies and supernatural powers with human appearance, properties, mind and soul.

In other areas these trend is manifested either in the form of a violent expansion or evolutionary diffusion, as a political-economic or spiritual pressing, or even as a voluntary acceptance of what was previously alien.

Expansion of similarity is manifested both in the spiritual realm with its inherent originality and in other areas, such as biosocial, economic, political, etc.

Throughout history of mankind we observe powerful phenomena with amazing dynamism of phenomena that transformed all the layers of human life and society; this and rapid emergence of the world religions, first in limited areas covering in a while the population of vaster regions. In this series there is a world communist movement; and a trend in fascist expansion, or nowadays - in pursuit of liberal-democratic transformation of lives of people in the planet after establishing democracy in its leading countries.

The answer to the question whether the spread of the phenomenon through bloodshed and violence or peacefully depends on the nature of interacting phenomena and specific historical conditions. Sometimes there is a combination of both.

Intolerance of a man, society or other forces to "the otherness of others" sometimes was absolutised and took terrible shapes. Let's recall medieval Inquisition or fanaticism of extremists of various radical parties, certain religious movements, racism or nationalism nowadays.

Expansion of similarity can feed equally on the finest ideas and ideals, and on basest emotions and passions of people. It can be a means and a mask-off of material interests, combined with them or other factors.

Among bloody and violent expansions are Nazism, racism, fascism, genocide policy, fundamentalism (religious or communist) - all these are different forms of brought- to-the extreme intolerance towards people of other nationalities, ethnicities, race, religion or other spiritual orientation, other cultures, political views or lifestyle. Marx's thesis on Feuerbach was the reason, if not the cause, of communist expansion in the world. In the movements under consideration the origins of intolerance and expansion are reflected both in the goals and in socio-psychological roots of radicalism, accompanying and feeding these ideas in the historical conditions of their emergence and adoption.

Tolerance for other based on similarity

Fortunately, human nature and anything alive in general comprise more than this. There is primal democracy of life consisting in the fact that ever from the beginning of his history, a man demonstrated, if I may say so, "intolerance against intolerance" - learned to tolerate their fellows, despite their simultaneous dissimilarity on other parameters: family members, clan, tribesmen and so on, up to the ultimate communities today.

Tolerance for other person, other lifestyle or dissent is not an invention of Western democracy alone. It is contradictory, on the ground of finding similarity of people, each other, imbued with ancient religion, spirituality of people, utopia, public movements (though not always and not everywhere), it is common for creative thinkers, universal human morale, ideas of Mahatma Gandhi, Albert Einstein, Bertrand Russell and others. All of the above is also an expansion and not only of humanism, non-violence and tolerance.

Tolerance to one's like is an important property and a condition for existence of any living community. Apparently, it is an invariant manifestation at a higher level of fundamental principles of being that manifests the self through density or a certain plurality (the solar system, galaxy, metagalaxies, system of atoms, molecules, protein, live cell, organism, socium, etc.).

Under uniformity or limited plurality of similar to each other species or individuals comprising this community, there is a mutual tolerance (within limits) as a condition for existence

Perception of similarity as a basis for unity. The logic of humanism

This fundamental property in human society is discovered through the engagement of people's consciousness. The evidence for what has been said is encountered everywhere in the early and modern societies.

For clarity let's refer to the ethnographic material, studied by the authors of the famous book "The World of the first Australians " (Moscow: Nauka, 1981). R.M Berndt and K.H Berndt noted the following features of Australian tribes: in the basis of a tribe's integrity is not just a similarity (likeness) of people of the same community, but their recognition of this fact. Along with other properties, the researchers highlighted social acknowledgement of a communion as a basis of a tribe, although the range of similar people can be more inclusive. The term

"Tribe" means a group of people sharing common language or a dialect provided they acknowledge this communion. This reservation should be given a consideration, as, sometimes a linguist finds similarities between two or more languages or dialects spoken in different areas; however, if speakers themselves do not recognize this similarity, they should not be merged into a single tribe. In this

case, it is important that similarity of languages and other common properties are socially acknowledged "[1, page 21]

Consequently, identity of representatives of any community has its own structure and rationale.

In order for the similarity of people to become the base of their community that generates tolerance for dissimilar in everything else in this community, it requires quite a high perception of belonging to this community.

Sometimes everything beyond the community of people with similarities is not normal and common for them. Thus the history of mankind began. Similar and dissimilar, like and different were unfolding in the minds and lives of people historically through the oppositions of "us" and "them." B.F. Porshnev believes "we" - is "not just a perception of real relationship, everyday interengagement of the known number of individuals.... In fact, this perception is achieved only through antithesis, through contrast, "we"- those who are not "they", those who are not "they" are - true men" [2, 82]. "They" - something alien causing intolerance. R.M. Berndt and K.H. Berndt made this observation: "Another point worth considering is the fact that a tribe is a relatively closed system with its own social organization and structure. Contact with other tribes may be irregular, limited to exchanges or ceremonies. Members of the same tribe are often prejudiced against members of other tribes. They may claim, for instance, that people of the neighboring tribe are cannibals and follow odd customs and their women cohabiting with dogs or that all their men - sorcerers "[1, pp. 23-24]

We can see that perception of similarity as belonging to a certain community does not occur randomly, but depends on historical conditions. It is a key to understanding of the mechanism of tolerance to other people.

In other words, it is as if you "forgive" another living being for being different from you in every other way when you feel own likeness to him in some ways important to you. But if there is no such awareness and feelings, your dissimilarity, even if you are similar in other respects, may cause exclusion and intolerance in certain circumstances.

In a truly democratic society tolerance to other, multitude (based on laws) exist as a single majority rule in this and mutually similar to each other people.

Similarity is one of the conditions of bonding communities of plants, animals and people from within and each time in a different way. Inside and each time in this community of plants, animals, and people. Similarity of the first two categories within their own species is biological.

People are aware of their likeness on various basis if there is something in common, which is essential: property, language, blood and kinship relations, territory, economy (economics), culture, psychology, genealogy of clan, tribe or a common history, common enemy, the self designation, endogamy or among the nations - preferred mono-ethnic marriages, religion, ideology, etc.

Perception of similarity of people belonging to a certain community may be based on any of their common characteristic, if the latter is of a particular value, causing mutual benevolence and tolerance as opposed to an "alien" - "they".

"They" - diverse alien world inclusive of everything hostile with wizards, witches and evil spirits. "We" is something normal. And if someone dropped out of this concept, at best he'd become an outcast; at worst he would be killed or committed to the flames as a carrier of evil forces.

Primeval history just as the following ones is lit with living torches. Our era with its numerous "witch hunts" in many societies is no exception.

This structure of social life confronts a different one - architectonics of humanism.

Logic (say, ideology as well) of peace or alliance sought by people in search of ending the conflict or hostility, always finds something in common, something establishing similarity of feuding parties.

Even William Shakespeare in his great tragedy "Romeo and Juliet" noted it. Feuding clans of Montague and Capulet equally shocked and plunged into misery by the death of their dear ones - Romeo and Juliet - stop enmity. "Oh brother Montague, give me your hand," - exclaims the Capulet in the last chords of the tragedy [3, page 129].

Famous Dutch and the author of "Three books on the Law of War and Peace" (published work appeared in 1625) Hugo Grotius refers to the same logic of humanism to justify lawless violence. "Besides, the sacred history as well - he writes - beyond what is contained in its canons, contributes also in the excitation in us of the same desire to communicate, since it shows us that all people are descended from the same ancestors. Thus one can confirm with good reason what once was expressed by Florentine in a different sense ... namely, that nature has established some sort of affinity between us, which implies that a person plotting against a person is the greatest unlawfulness". [4, p 47].

There are other paradigms, confirming the above structure of ideology of peace and union, non-violence and tolerance. Let us refer to the XX century.

Mahatma Gandhi is famously known to rely in his humanism on reason and morality, unity of the holy books of different religions: "I believe that the Bible, the Koran, the ZendAvesta are divinely inspired as well as the Vedas... But I would argue that I know and understand the true essence of teachings of the holy books. I refuse to accept any sort of interpretation, however scholastic it may be, if it is

contrary to reason and morality " [5, pp. 475-476]. Mahatma Gandhi found his basis of humanism - the likeness of people of different spiritual paths through the similarity of their spirituality.

Throughout the history, along with violence, blood, troubles and wars, we observe prevalence of humanism, seeking to penetrate into all pores of society, which affirms nonviolence and tolerance through its contradictory embodiment of formula (logic of humanism) - approval of dissimilar similarity - in architectonics of all sorts of movements and processes.

At the same time the expansion of humanism ultimately extends beyond similarity, uniformity of diverse and different world of people, while expansion of similarity that carries violence restricts these limits, opposing one community to another by absolutization of intolerance to another, diverse otherness of people.

For example, the Renaissance brought about the idea of man and love for man to the forefront. Were removed all restrictions in the understanding of a man while the idea of man ultimately expanded human community in the eyes of contemporaries.

Today the logic of humanism comprises the frame for the structure of the World Communities, Universal Declaration of Human Rights and other achievements of modern civilization with its system of international law, difficult shifts towards a new world economic order, removing global confrontations of humanity poles.

In the same context, it is worthwhile to mention modern environmental mentality of people with the central concept of unity of the biosphere, the noosphere, fragility and uniqueness of our planet, unity of all the animate and inanimate in the world.

However, in this case it involves such an expansion, when given social movement (a phenomenon and a process) is not limited to distribution of one or more of its

features. Phenomenon through representing the system (integrity) is attempting to assimilate to itself not a part but rather a oneness (system) of another phenomenon - a man, a class, a party, a society, etc., i.e. all of its diversity. This being said, diversity itself is not denied absolutely by the carrier of a uniform beginning. What occurs only is that a variety of other phenomena (a society, a party, a person) are assimilated to a diversity of the source of similarity expansion.

Next to it, through it and with its knowledge in different parts of the world one of the greatest ideas of mankind was affirmed – the idea of universalism (N.I.Konrad). "Politically, the universalism was an illusion" [6, page 275], whichever military-political tragedy of incarnation of the universal idea we would take. But the universal idea - idea of universalism was successfully embodied and gained strength in great cultural symbiosis of nations, in world religions.

To understand the hierarchy of uniformity and similarity expansion it requires focusing firstly on the expansion of similarity as expanding the uniformity in space and time. It applies to the stability of things in time, the process of expansion of the universe, the origin and spread of life (genetics) or religion and ideologies. Indeed, the uniformity is understood in a relative sense as an extension of quite specific and definite diverse systems in space and time - in a social aspect – of thoughts, lifestyle and behavior or, in general, an infinite set - phenomena - fragments of a diverse world considered by its stability or conversion of some systems into their likeness by other systems.

In other words, in the first case there is a "translation" of the system and its transformation into a relative uniformity through conversion of other people (or things, events and objects) into a kind of source; creation of plurality of such things. In the same line there is a continuing uniformity of fundamental principles of the universe meaning anthropic principle.

Another type of expansion of similarity is introduced by the motion of uniformity and not so much in the space, the phenomenon retains its spatial limits, but in time. The thing being a stable certainty retains its likeness in each new moment of time.

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Bibliography

1. Berndt R. M., Berndt K. H. World of First Australians. — Moscow, Nauka, 1981.
2. Porshnev B. F. Social Psychology and History — Moscow, Nauka, 1979.
3. Shakespeare W. Comedies. Chronicles. Tragedies. — V2, Moscow, Fiction, 1989.
4. Hugo Grotius. On the Law of War and Peace — Moscow, State Publishing House of Legal Literature, 1956.
5. Mohandas Karamchand Gandhi — My Life. Moscow, Nauka, 1969.
6. Conrad N. I. West and East, Moscow, Home edition of eastern literature, 1972.

Guess Mendeleev. Hypothesis about changing the periodic law

17.02.2014 00:01

...Overwhelming part of the visible universe is composed of baryonic matter in the state of plasma. As we are going to see further, it is important in order to have a better understanding of Mendeleev's periodic law today. The fact of the matter is that Dmitry Ivanovich spoke about the relationship of elements in regular conditions. Lets refer to his words: "It is easy to assume but currently it is yet to be proved that atoms of elements are complex beings formed by summing up some

ever smaller parts, that what we call indivisible (atom) is indivisible only by conventional chemical forces as particles, indivisible by physical forces in regular conditions...

Presented by me periodic property-weight dependence seems to confirm such a hunch..."1. Atomic weight and properties are the ground to determine periodic law. Today researchers talk about it in layman's terms: "Based on current assumptions, the phase state of most of the baryon substance (approx. 99.9% in weight) in Universe is plasma"2.

Mendeleev speaks plainly about "regular conditions" that apply to certain parameters of temperature, and the properties of elements are taken within these parameters common for upper layers of Earth and its surface. However, "regular conditions" do not include the fourth state of matter - plasma, specific to the major part of visible Universe. Apparently, properties of the elements in "irregular conditions" of Universe could not be known to Mendeleev, who relied primarily on properties of the elements well known in his time as a ground for discovering the periodic law. Only in 1879 U. Kruks invented plasma state of matter.

Meanwhile, if assumed that properties of the elements differ from one another in the plasma state on top of their difference in "regular conditions", it is worthwhile to talk about the need to integrate them in order to identify a fuller or partially modified periodic conjunction for every state of matter. The same approach should be applied in relation to ultra-low temperatures and properties of elements close to absolute zero, that is, in an environment where differences of elements are shown in a new light in addition to "regular conditions".

Ions of different elements in a plasma state differ from one another, and it has a role to play in the attempts to see something new in periodic coupling of elements. Periodic system of elements is crucial for philosophic understanding of Universe and in this sense a refined picture of relationship of elements can be helpful.

1. Mendeleev D.I. Selected Works, Volume 2 / Ed. USSR Academy of Sciences, 1934. _ C. III.
2. Zhdanov, Vladimir. Plasma in Space.Krugosvet .Retrieved February 21, 2009.Archived from the original on August 22, 2011. Also see. : Wikipedia.

Not apriory knowledge but knowledge – faith. World by Kant and world by Hegel.

Dark matter and dark energy are lately receiving a lot of controversial judgments while overall leaving us with impossibility of the efforts to detect the events and essence of a new area of objective reality. At the first sight, this dilemma suggests segmentation of the Universe into the types of matter principally cognizable and the types that remain incognizable (probably for the time being?). So far all attempts are in vain, for a thing in itself is not yet a thing to us. In other words, Hegel establishes all kinds of the matter as a world of universal connection and cognoscibility in one case, and Kantian thing in it in another.

This is also supported by the fact that each of the worlds (visible Universe and dark matter and dark energy) is intrinsic to its single certainty, its single quality. These certainties with enormous variation of quality do not show sign of one another

Optimists would not rush to resolve the issue in Kant's favor, however these aspects should not be ignored by the science. Kant's important judgment is the difference between cognition of local reality available for trial, and universal definitions of a priory knowledge.

There is no matter, there is only faith placed in the existence of the matter, which emanates from alleged semblance or identity of the matter with its

appearances. The idea of identification of «one» with «another» is wonderfully expressed in its absolute form in Hegel: «all rational is real, all real is rational». In our case: appearances of the matter are identical or similar to the matter itself or, in better words, by the appearance of the matter one can cognize the very matter. And this is the concept of cognoscibility of the world. Meanwhile, we are not rejecting the concept of world cognoscibility, but rather challenging the existing forms of cognoscibility, when appearance of the matter allegedly reflects the matter per se. We see walls, structures, trees, people, city, stars, and the sky – anything, however these are not the matter but its appearance. Such an approach should not be treated as Berkeleianism or nonberkeleianism, we do not reject scientific materialism, and the question is to identify the problem emanated in association with the attempts to find a scientific faith in the process of cognition. Neither our approach to this Universe involves Kantianism – things in themselves for we acknowledge cognoscibility of the world as a comprehensive concept. We are not rejecting something beyond our consciousness and feelings. However, one has never ever seen the matter, seen is just its appearance. It is based on appearance properties of the matter, on their interaction and studies that we judge about the matter. We assert, for instance, existence of one world based on the oneness of appearance of the matter. But can it not be a non-continuity of the matter before its appearance in the external connection system. A good example is the existence of this Universe and dark matter and dark energy. Quality gradient among the worlds can be absolute and contacts among them impossible. When we state that «matter is nonexistent» we reject the faith or acknowledgement of a thing existing beyond our feelings and consciousness however not in the kind traditional philosophy is accustomed with. Matter can be disintegrated in the infinite worlds exposing the unity in the definite of a certain specific world. It is in the definite of a certain world, particular Universe that the oneness and holism are exposed, however they can be not available in the infinity as well. Attempting to capture infinity with the faith in infinity, one tries to «expand infinity» of his own world.

Breaking out from local to infinite and only based on scientific belief one builds up the concept of matter.

Aristotle's extraordinary statesmanship and stroke of genius are astonishing, who at the dawn of antique philosophy emphasized the subjective truth that it can't lay claim to objectivity without. It was given in his time at the root of the problem. No pun intended, objective is initially subjective and not just by the form of it at that.

This article is not aiming to study the historical problem but it has to be noted that Aristotle in his works already showed highlights of terms and solutions for the scientific challenge. In *Metaphysics*, for example, Aristotle focuses on crucial aspects of faith: «but opinion is associated with faith (indeed, one who has an opinion, can't help but believe this opinion), meanwhile faith is not common in animals, but imagination is. Further, any opinion is accompanied by faith, while faith – by conviction and conviction by reasonable ground (logos)»[1, c. 431]. We believe, by Aristotle's essential to acknowledge that true opinion is faithlike knowledge in credibility of opinion. Wikipedia provides following connotation: «Faith is acknowledging something as truth without relying on facts or logic, just based on inner (subjective) confidence that requires no proof though sometimes finds them...»[2]. This definition is not formulated clearly: often times faith needs evidences and logic all the way through the boundaries of thesis: I believe since preposterous.

When a man has knowledge of something, he has faith, confidence in that whatever he knows is true. He can think about falsity of some knowledge however in this case he believes in the falsity of knowledge. Reason is based on faith, while faith – on reason.

To prove it is easy. As an example, let's take a piece of bread. A man, before taking a bite of it, sees and touches it, however not fully. A man is unable to have a full knowledge of something. To see fully what a piece of bread is composed of is not possible to him fundamentally. But the food intake process requires of him to

trust his senses and reasons that tell him the bread is fine and eatable. A man should trust in what he eats relying on his senses and reason. Life cannot be executed without the faith. And it is at every step.

Science applies a concept of likelihood of events. It's a unity of definite and indefinite in the impact of events. This concept in a man's every day life is built upon the unity of knowledge and faith. As we have pointed out, a man is unable to have a full knowledge of a subject of his concentration; it provides a ground for the faith in order to obtain a better subjective certainty for decision-making. A man takes a decision without a full knowledge and faith; incomplete knowledge forms a ground for confidence in success of his deeds or activities.

To further build up knowledge with faith for decision-making is subjective, for it relies on human faith, and it is objective as well as it is associated with objective likelihood. A fan of opportunities with different likelihoods.

Based on the developments in Aristotle's position it becomes clear that the very first knowledge—faith is faith in truth of one's opinion. Without accentuating this issue, it can be brought to apparently absurd thesis. It can appear that whatever a man does state, it is through faith in his opinion that he states the truth in the first instance. A man from this perspective can assert atheism or faith in God, duality or plurality of the reality, or any other thing but in each particular case he can believe in true nature of his statements. At this stage all the different controversial opinions are tantamount and equivalent. Even if any of these opinions relies on experience – practice. The practice itself is exposed to subjectivism for it is based on the faith in truth of practice as a criterion of truth. In other words, any opinion logically and practically rationalized, or the one built on other arguments and evidences cannot be absolutely objective and absolutely true. Between a man and objective or absolute truth there is subjectivity. In other words there comes a question whether our knowledge, any truth on the basis of its reality are relative?

This again brings to light our knowledge about matter that rather oddly is complimented by faith in its existence. Important in this aspect is truth: there is no

matter, however we trust in the existence of matter. All we see is appearance of matter always and everywhere while matter itself was never seen without its appearance, it is nonexistent in its pure form, if only its infinite appearances across the Universe. Matter as a whole was never seen or sensed. We trust that all we can see everywhere is only an appearance of something, which we believe in as in the existing matter. However, the truth itself by the logic of our judgments carries a moment of subjectivity. Hence absolute truth doesn't exist: we believe in absolute or objective truth, without this subjectivity any human judgment cannot be.

We not only can't see a matter without its appearance but also are doomed to believe in its existence. Based on simple and complicated logical operations, judgments, often coming from practice and experience, we conclude the existence of matter that is hidden from us «under» its appearances, never actually manifesting itself in its pure form. We can only trust that matter exists for we believe in its current existence. Of interest are J. Bruno's judgments though on a rather different aspect, we'll provide them for more textual clarification of our issue. In our view, Bruno's judgment is fair, when he notes that «no one can keep you from using the name of the matter your way as similarly many schools having own variety of values» [3, c. 1996]. J. Bruno for another aspect, relying on Aristotle's arguments, suggests: «Thus, as in art, in the infinite modification (if it was possible) of forms, they preserve within one and the same matter... same is in nature, in the process of infinite modification and adherence of forms one after another, there is always one and the same matter» [4, c. 1996]. In other words no matter what item we are going to take, «under» it there is one and the same matter. However to discover it as it is with sensory organs is impossible.

Analyzing Kant's ideas, Heisenberg underlines that experience never attaches any universality to our judgment. For instance, the sentence «Sun rises every morning» means that we do not know based on the past any exception from the rule and hence we believe it will rise again in the future. However, one can suggest an exception from the rule. If the judgment has a universal nature, i.e. if one can't think of any exception, it should be a priori» [5, c. 47]. We won't go into

details about Kant's theory but we will underline an important idea that any concept that has a universal nature, within the aspect of our study is based on faith in this universality rather than on a priori. Universal nature of certain knowledge unlike Kant arises not on the basis of a priori knowledge but on the basis of faith in universal nature of concepts.

We shall turn to an aspect that was highlighted by Kant while introducing a prioriknowledge: infeasibility to understand experience-based universality. In fact it is not about them, it's about faith in what can't be embraced by mind based on experience. There is knowledge based on experience, practice and there is knowledge based on faith. They are interrelated.

The matter, as a universal concept, originates not only from experience but firstly from faith in its universality. Meanwhile, much tells us that matter is broken up into worlds or universes and no contact among them is possible due to absolute variation of their qualities and certainties[6,].

To that effect we have been introducing in scientific definition the involvement and noninvolvement categories[7]. Broken up worlds that matter is likely comprised of are not involved in each other's processes, they lack any interaction. In this sense lack of interaction among one another is similar to nonbeing. Nonbeing in one world is a being in another world, certainty of one world fails to find certainty of another.

Every step from local experience to universality there is a reason for new knowledge to arise based on faith as the way to refurbish an experimental knowledge.

On the other hand, we can apply world cognoscibility concept within the limits of this Universe however never with regard to the matter beyond it. Acknowledgingexistence of other worlds not involved in the process of this Universe is amount to the denial of their being, denial of the world cognoscibility concept beyond this Universe.Disruptiveness of matter leads to the state, when cognoscibility concept is real in one case while in other parts of the matter, using

Immanuel Kant's definition, is void so that thing in itself will prevail. This Universe is thing in itself getting to be a thing to us but only in this Universe. The thesis will be refuted by successful attempts to find a certainty such as dark matter and dark energy, by discovery of their certainty by the certainty of this world. Each world has its own certainty; interaction proves that certainties are available to be discovered.

Immanuel Kant's studies are given a new dynamic. Involvement and non-involvement categories are available everywhere in this world, in every item. In this Universe there are no things in themselves. In the processes of interaction, nearly always not quite fully covering the objects, there is something involved in them and something not involved. Consequently, part of the processes not involved in the interaction, appear as a non-being thing for another thing that has joined the interaction. A thing is not only an identity of a being and non-being by Hegel, but a disintegration of a process into those that are subject matter for another thing, and others are non-beings as those not involved in the interaction.

A question arises: is it not easier to decline the acknowledgment of the existence of other worlds if they appear as things in themselves identical to non-being?

Example with the dark matter and dark energy suggests that such worlds do exist and the concept is supported by natural scientists. If we take being and non-being in one thing for another thing within the interaction, it's just one aspect of a mobile controversy of the being and non-being in the things with dynamic edges. A thing having impact on another thing is causing a certain mobile matter non-matter relationship within it.

«There is no matter » – and it's not a metaphor for a more embossing expression of faith in a universal concept, which mind without faith cannot embrace.

There is no matter in its pure form, as something existing as a keystone. There is a contrary thesis: appearance of the matter is the matter. Then the matter doesn't

serve as a keystone but is rather enshrined in infinite appearances. However throughout millennia Aristotle's thesis had been a leading concept of philosophic studies and the matter had to be viewed as universality that was and is expected to be believed in. Experience without faith can't help mind to transition to understanding the universality.

At the same time it has to be noted that non-involvement of other worlds in the processes of this Universe, other parts of the interrupted matter in a form of many other worlds beyond contact with this world stands for the fact that the matter is real and not real as being. It constitutes identity of being and non-being in one and the same not just in Hegelian sense of word, it is also broken parts of being that are non-being for one another.

It occurs due to the fact that certainty of one world does not show the certainty of another. Among the worlds there can be an infinite variation of quality.

References

1. Aristotle. *Metaphysics*. Assays in 4 volumes. Volume 1.//Moscow: «Mysl» - C.431
2. ru.wikipedia.org/wiki/
3. J. Bruno, 1940 / *World of Philosophy: Book for reading*. In 2 V., Part 1. Original philosophic problems, definitions and concepts. – M.: Poliizdat, 1991. – C. 1996.
4. *Ibid.*
5. V. Heisenberg, *Physics and Philosophy*, M. Science 1989.
6. L. Hindilis, *Multitude of Inhabited Worlds. Methodological aspects/Universe, astronomy, philosophy*//Moscow State University Edition, 1988.

7. I. Asadullaev. Being – dissonance symphony/Dushanbe: Эп-граф, 2014. – С. 104-115,242-253. Internet, I. Asadullaev, Being – dissonance symphony:http://nbpublish.com/book_26315.html
8. Being and non-being of many universes. About new philosophic categories of involvement and non-involvement// VAK Journal “Politics and Society» №9, 2011. Socio-political Institute of Russian Academy of Science. Russian journal on social politics, pgs. 82-87.
9. Internet: Dark Energy, published admin in пт., 2006-12-22 03:00; (interview with senior scientific assistant of Nuclear Research Institutes of Russian Academy of Sciences, Academician Valery Rubakov)
10. Avicenna. Essays, Volume 1//Dushanbe: Donish, 2005. – С. 183.
11. I. Asadullaev. Freedom generates hope//»Business and Politics» 15 August, 2006
12. Aristotle. Essays in 4 volumes. Moscow: «Mysl, V. 3, 1981. – С. 391.
13. B. Kusnetsov, Einstein. Life. Death. Immortality/ Moscow: “Nauka», 1972. – С. 133.
14. <http://www.centrasia.ru/newsA.php?st=1312833900>
15. Aristotle 1976 –Aristotle. Essays in 4 volumes. M., 1976.
16. AbuBaker Ar-Razy 1990 – AbuBaker Ar-Razy. Spiritual Medicine/Preamble. Dushanbe: Irfon, 1990.
17. Avicenna 2005 –Essays. Dushanbe: Donish, 2005.
18. Heisenberg 1990 –B. Heisenberg. Physics and Philosophy. Part and a whole: Translated from German. Moscow: Nauka. Chief editorship, Physics-Math. Literature, 1990.
19. Aristotle 1976 –Aristotle. Assays in 4 volumes. Moscow: Mysl, 1976
20. Bertram Russell. Wisdom of the West/M.: Publishing House «Respublika», 1998. – С. 226.

21. I. Prigozhyn, I. Stanger. Order from chaos: New dialog of human with nature: Translated from English/General edition of V. Arshinova, Y. Klimontovich and Y. Sachkov.- M.: Progress, 1986. —432 c.
22. Unity of material and ideal, and expansion of semblance (universal code of opposing proportional activity) / VAK Journal «Politics and Society» №3, 2011. Institute for Socio-Political Researches of Russian Academy of Sciences. Russian journal on social politics.
23. E. Ilyenkov, Dialectic Logics. Politizdat, 1984. – C. 165.
24. Avicenna. Collection of philosophical works/Moscow: «Nauka», 1980. – C. 152.
25. M. Lomonosov. Full collection of writings. Volume 3/M. -L.: Publishing House of USSR Academy of Science, 1952. – C. 153.
26. Reflection, Darwin, Sufism. Universal law of reflecting proportion. /VAK Journal «Politics and Society» №12, 2012. Institute for Socio-political Studies of Russian Academy of Sciences. Russian journal on social politics. Pgs. 86-92.
27. K. Villy, V. Detye. Biology. – Moscow:Mir, 1975. – C. 220.
28. Aristotle. Collection in 4 volumes. Volume 3/ Moscow: «Mysl», - 1981. – C. 123.
29. Georg Wilhelm Fredrik Hegel. Writings of various years in 2 volumes. Volume 2// Moscow: «Mysl», 1971. – C. 104.
30. Internet: Dark energy, Published admin в пт., 2006-12-22 03:00; (Interview with lead scientific assistance of Nuclear Research Institute of RASc., Academician Valery Rubakov)
31. See. Universe, astronomy, philosophy // MSU, 1988.
32. L. Hindilis. Multiple inhabited worlds. Methodological aspects / Universe, Astronomy, Philosophy // MSU Publishing House, 1988. – C. 93.

33. V. I. Arshinov, Y.L. Klimontovich, Y.V. Sachkov. Natural Science and Development: a dialog with the past, present and future (Post Scriptum) // Ilya Prigozhin, Izabella Stengers. «Chaos from Order» / 1986. – C. 420, Internet.
34. V. Kusmin. Concept of Consistency in K. Marx's theory and methodology / M.: PolitIzdat, 1976. – C. 18-19.
35. N. Maiseyev. Vernadsky and modern times. – Questions of Philosophy. 1994. №4. c. 13.
36. V. F. Asmus. Metaphysics of Aristotle // Aristotle. Collection in 4 volumes. V.1 / M.: «Mysl», 1975. – C.34.
37. Mendeleev's Periodic System, General theory of interactions: www.b-i-o-n.ru/theory/atom/periodicheskaja-sistema-mendeleeva/.
38. D. I. Mendeleev. Collection of works, volume 2 / Publishing House of USSR Academy of Sciences, 1934. _ C. III.
39. Vladimir Zhdanov. Plasma in Space. Krugosvet (Around the Globe). Verified on 21 February 2009. Archived from original source on 22 August 2011. See: Wikipedia.
40. Mendeleev's Periodic System, General theory of interactions: www.b-i-o-n.ru/theory/atom/periodicheskaja-sistema-mendeleeva/.

Totem the Donkey. A hypothesis about unification of Aryan clans and tribes is confirmed?

World known Russian archeologist Victor Ivanovich Sarianidy in his interview shared a story about his discoveries on extraordinary royal burial of a donkey in

Margiana civilization that in our opinion supports a hypotheses suggesting that remote Iranian ancestors in the ancient times had a totemism associated with a donkey.

Below is a fragment of the interview with Victor Ivanovitch Sarianidy: «Donkey the King». In Gonur archeologists came across yet another “beastly” whim of the ancient Margians.

- We excavated nearly 80 burials of animals such as rams, donkeys, oxen, goats.... There are plenty of dog graves, part of which is located by human burials.

By Victor Sarianidy, some of the graves of our minor brothers have a rather mysterious appearance. Those are “royal” burials of animals.

- In one such burial ground we discovered for instance remains of a donkey and three lambs by his feet. The animals were buried each in separate rooms, “chambers”, “ad modum human”, all resting on their right sides, heads turned towards the north with bended extremities as was customary for deceased humans to be buried. By many of their attributes these and some other animal burials resembled those of ancient rulers of Gonur. Donkeys and rams, for instance, were laid in «cribs» - special platforms made of bricks and clay (representatives of Margiana aristocracy were entitled to such burial arrangements by status). Moreover, zoo-tombs were filled with may precious items: daggers, darts, vessels, gold pieces, bonze items including specific batons with four-tooth spike tops – explicit signs of a high military rank of the entombed...”⁸ (№ 26008 of August 7, 2012 г. Source – Moscovski Komsomolets. Internet address of the article - <http://www.centrasia.ru/newsA.php?st=1344407820>)

Concordant to this discovery we expressed hypotheses (2003), which can help explain this page of the history.

⁸ № 26008 of August 7, 2012 г. Source – Moscovski Komsomolets. Internet address of the article - <http://www.centrasia.ru/newsA.php?st=1344407820>

Here is the point about the scientific hypothesis, according to which in ancient times, long before the events reflected in Avesta, our forbears played an exceptional role in integration and development of other tribes and peoples. But the paradoxical point, in this purpose, is that we have to restore the picture of their ancient totemism. On the basis of the most preliminary linguistic, psychoanalytical analysis and mythology there emerged a hypothesis of the existence in the archaic past of our forbears of the quite concrete totemism. The hypothesis proclaims that we should consider an ass, alongside with other animals as a totem of ancient forbears of Iranian tribes. Under the notion totem in distant past of the modern peoples were meant different animals, as well as ass (khar in the Persian language) as a totem was an ordinary phenomenon, as totems camels, sheep, snakes, dogs etc. However the main point of the hypothesis lies, first of all, in the fact that ass was a totem, perhaps, of one of the most outstanding and significant clan or tribe, that has made a colossal impact on the vast area of humankind, who played, to our mind, an important role within the process of forming of numerous societies and their spiritual life in the East and West. We will try to pass through the path starting from guess to the description of a system of proofs, evidencing the existence, yet in prehistoric time, of the concrete definite society and its totemic interpretation.

The ancient Indo–Iranian tribes also pointed out different animals as their totems. The most ancient and archaic spirituality–totemism featured all nations, clans and tribes who elected their emergence to a certain animal or any other breathful creature, endowing them with sacral characteristics and ultra natural essence. To our viewpoint, the level of evolution of the totemic epoch human being and the totemism itself corresponded to their linguistic semantics and spiritual interpretations. Focusing our attention to our forbears’ totemism, we should take into account unusual distance of the archaic time. They are separated for many and many of thousand years, perhaps even dozens of thousand years, with other subsequent mythological and religious beliefs with their vivid and quite abstract images (for example, deity-sun or any other divine being). In comparison with

above mentioned archaism, Zoroastri(ani)sm, Avesto, Gats, other historical sites and spiritual formations seem like a yesterday evening.

Totemism, which seemed, at the beginning, to its researchers as merely a curious incident, "... is the most significant characteristic, by literal, of all primitive societies in any part of the world"⁹ (Boroday, Y.M. To the Issue of Socio-psychological Aspects of the Emergence of Primitively Ancestral Community. // The principle of historicism within the cognition of social phenomena. – Moscow: Nauka, 1972. – p.198). Boroday Y.M. also writes "The distinctive point of totemic belief is terrible mystic fear of corresponding animal. However, this is not just a fear, but, in its own way, the divinization". And then: "So what is it – totem? As usual, it is some kind of animal – snake, kangaroo, eagle etc. (less common – plant or any other object), which becomes a taboo for all members of the given community. With the exception of strict definite rituals of circumstances, totem is barred to be touched, it cannot be killed, it is forbidden to devour its meat and generally to make it any harm or insult". To our mind, totemic representations include directly original semantic energy of supernatural and saint. The ancient people of the archaic period had everything primitively religious in their surrounding, but the most dominant was totemism as one of the vivid representation of initial moral images. Therefore, one of the main genetic foundations of the notion sacred, to our mind, is totemism of the archaic period. Exactly during this period there forms the semantics of sacred in general, as a organic part of the notion totem. Later on the meaning and word of sacred itself branched off into the concepts and words, denoting divine beings and divine. However it requested dozens of thousands years.

The most significant linguistic distinction specific for this period of development was undividedness and polysemy of notions.

⁹ Boroday, Y.M. To the Issue of Socio-psychological Aspects of the Emergence of Primitively Ancestral Community. // The principle of historicism within the cognition of social phenomena. – Moscow: Nauka, 1972. – p.198

It is generally known fact that language is the most conservative in the history of human kind. Due to this fact, there is the possibility, of course with the definite extent of risk and probability, to reconstruct the “darkest” stratum of historic past. There is no doubt, that going back to the prehistoric past, it is impossible to affirm something absolutely. However, this should not restrict scientific survey, which through the way of guesses and doubts, arguments and their repeated review tries to reflect the real picture, despite the fact how far it was situated from us.

There is a stratum of words – terms and notions in the Indo-Iranian languages, the exploration of which, within the context of history, can disclose the history of the development of the most ancient points of much significance. The assumption that one of the terms of our forbears was considered to be ass (*khar*) associated with such words as *khar* (enormous, immense), *kharsang* (a stone of enormous size), *kharchang* (a crawfish, a big nipper, claw), *kharbusa* (melon, the word *khar* within the semantic structure of the word means something which is rather magnificent), *khargush* (hare, by literal “big ears”) which denote something considerable, great, immense. There are the names of the highest mountains given in Avesto called *Khara Berezaiti* behind of which the sun rises. The same resembling by sense, however being a reflection of another clan of religious semantics were considerable, superhuman, divine and extraordinary meanings of words *Bukhara*, *Khorog*, *Khari-Krishna*, *Kharikhara*, *Khvarna*, *Khurshed* and also *Kharishchandra* from antique Indian mythology. That part in these words which originates from Buddhism, in its turn, had originally pre-Buddhist terminology. The notion charisma comes from the Latin word *khar*, which in this way of sounding in this language means God. Here we would like to outline, for instance, in ancient Babylon in the guise of ass the God Ninib was presented.

Some researchers can be resented by the inadmissibility of mixture of all this terms and notions. However we will try to clarify the situation. Moreover a philistine will resent, for who associations of “sacred”, sacral with that clumsy stubborn creature as we know the modern ass. However we should accept the fact

that totemism as one of the most original religions coincided with original genesis of language, specific semantics of its epoch. Moreover, as it will be pointed out below, the notion of sacral emerges in the deepest antiquity dozen thousands years ago at the dawn of civilization of primitive kind. On the verge of the transition of pre-human biological essence into social essence. As I have already mentioned there are dozen thousands of years between sacredness of archaic period and sacredness in mythology. However the distinct point is steadiness of human language, conserving sometimes terminological, phonetic and semantic foundations even up to our days.

For further analysis Sigmund Freud's investigation of totemism and taboo is of greater importance. "Here we can recall some confused by their unclearness data on contradictory semantics of the word "taboo": sacral and impure, noticed by Wundt" Freud writes. Originally the word "taboo" had not had yet the notion sacral and impure and meant only something from demon, which is banned to be touched, though by this way outlining important, common distinctive feature for both opposed notions; however conserved commonality shows that there was a resemblance between two parts of consecrated and impure, giving place to differentiation later on.

In contradiction to this – S. Freud writes further, - it comes from our reasoning the mentioned double meaning attributed the word "taboo" from the very beginning, which served for denoting a certain ambivalence and all that grew on the basis of the ambivalence. "Taboo" is ambivalent word by itself, and then as we consider by means of fixed word one could understand the fact that which turned out to be a result of preliminary research, specifically the ban of taboo is a result of ambivalence of feelings. The research in the ancient languages evidences that there used to be a good deal of such kind of words, denoting contradiction in known or even in the same sense, - that is they were ambivalent as well as the word "taboo". Insignificant sound shift within original words which are internally contradictive by sense contributed different verbal expression to both integral contradictions in

the word taboo”¹⁰ (S. Freud. Totem and Taboo: Coll. Moscow: Olymp; JSC “Publishing House AST – LTD”, 1998 – pp. 88-89).

There takes place a division of notions of sacred and impure, denoting the same animal which used to be a representation of totem.

To our opinion, the terms, the conceptual content of which are connected to something “sacred”, sacral in a certain religion do not emerge on “empty space”. These terms emerged in the deepest ancientry and used to transfer from one spiritual and religious system to other, later ones, partially varying by form and content, though conserving the notion of sacral – “sacred”.

First of all we assume the fact that human language evolved from poly-semantic words and notions few in number through differentiation which led to emergence of numerous notions and words divided from each other. If the word khar means something awkwardly shaped, so perhaps the word khar and another word Khvarna, meaning bright, so is the sun – Khurshed in deep ancientry had original root, which admitted two new meanings – bright, light (Khurshed) and another meaning – awkwardly tremendous (khar), by conservation of animal name. It is not casual, that one of the most winding rivers the river Pyandzh was originally called Kharob.

No doubt, there lay thousands of years of evolution of human society and language. Moreover, by the word, nearly co-sounding with word khar, people used to point out divinities of Indian mythology, which appeared thousands years later. For example, Kharikhara in Indian mythology is a divinity combining in himself Vishnu’s (Khari) and Shiva’s (Khara) features ¹¹ (Dictionary of Mythology. Moscow: “Soviet Encyclopedia”, 1991, - p. 585). Obviously, extremely complex differentiation of more ancient main root took place within the long-term process of human evolution in this part of the world. The latter originally combined in itself the notion of huge, large-scale and horrible, impure, destructive, lethal

¹⁰ S. Freud. Totem and Taboo: Coll. Moscow: Olymp; JSC “Publishing House AST – LTD”, 1998 – pp. 88-89.

¹¹ Dictionary of Mythology. Moscow: “Soviet Encyclopedia”, 1991, - p. 585.

disastrous and divinely tremendous, great, bright in earlier period in the guise of ass as the representation of totem of ancient imagination of our distant forbears.

It would be wrong to say that historically there was only one totem – ass, we can assume it appeared at the same time with such totems as horse (asp), bull, cow (tur, gov), ship, dog etc. in linguistic customs of other clans and then tribes. However, various totems or divines became to assume a broad significance, if a clan, tribe or nation – the bearer of this spirituality turns out to be leading among other because of its specific role or events: wars or integration or both one and another all together. Due to some causes one clan becomes leading as well as Gods and Spirits of this clan. Either different spirits and gods or totems within the period of ancientry become relatively weaker in subordinate clan. Max Weber writes the following: “Though in some cases the emphasis of honoring (in our case – totem – I.K.A.) does not help: it appears that enemy’s gods were stronger. And then gods’ reputation is considered to be undone. If in this case when there cannot be found the means motivating unfavorable behavior in such a way not allowing his prestige to fall, but on the contrary to progress, his followers move under protection of stronger gods”¹² (Max Weber, Selection. The image of society. Moscow: Yurist, 1994, p. 102). Meantime, the other clans accepted a new term, but with different sense, denoting somewhat sacral – “sacred ass” not completely as totem, since they have their own totems. (Within the period of antiquity there, perhaps, appears the hierarchy of totems, spirits, which are predecessors of hierarchy of Gods). The mentioned term can be conserved or altered insignificantly, though being detached from denoting totem of leading clan and tribe by its sense. Such shocks, probably, promoted the process of differentiations of meaning of the same term by its insignificant alterations. The celebrated scientist, doctor of historic sciences Ranov V.A, who I addressed to with consultations directed my attention to the fact that there were rock carved images of ass coming from ancientry, but not so widely as horse. This fact, from our point of view, does not evidence the fact there was not totem-ass, but the fact that, probably, after the integration of followers of this

¹² Max Weber, Selection. The image of society. Moscow: Yurist, 1994, p. 102.

totem with other clans or tribes the term khar did not start to denote a new totem and was accepted sacra, sacred divine.

In connection with this we may assume the fact that in deep ancient clan or tribe which had ass as totem, played a colossal role in vast scale. The term khar as a root of words and developed meanings entered the world outlook of other clans and tribes and through thousands of years in to the mythology, including Old Indian, and the old way of thinking and Greek mythology and Latin language, in which divine was denoted by the term “khar” (the word charisma comes from this)¹³. (In the dictionary – “The Oxford Dictionary, Oxford University Press 1996» the following explanation is given to the English word charisma: “ecclesiastical loan from Greek kharisma, from kharis...”, it should be pointed out the Greek words begin with letter kh). There were many other clans with other totems, but now the sacral notion of khar has already become leading in connection with leading part of bearers of this totem.

There may be later impacts on ancient Egyptians and Babylonians as a result of civilizationwise, culture and politicwise events.

The strong argument upholding our hypothesis is the prohibition of using totem-ass's meat even today. The fact that its meat is inedible appeared later, it is secondary explanation. (Meanwhile in Korea ass's meat is regarded as delicatessen and ass itself is called as heaven cow, the Italians who belong to Arians eat ass's meat as well). One may say, that people of today do not eat snakes and many other leaving creatures, but that rather supports the rule than condemns. Some of them are unavailable the other became physiologically unacceptable in a specific psychological situation, the third used to be totems in other tribes of our distant forbears. However, due to some indefinite specific events, the tribe which was connected to totem ass influenced the vast areal of mankind with the fact that the term, denoting its totem on the basis of which there developed different meanings, after dozen thousands of years became an organic part of terms of following

¹³ “The Oxford Dictionary, Oxford University Press 1996» the following explanation is given to the English word charisma: “ecclesiastical loan from Greek kharisma, from kharis...”, it should be pointed out the Greek words begin with letter kh.

civilizations. It was not merely an accident, which happened as result of large scale and long term activity of bearer of this totem at the time.

However, it should be taken into consideration that the emergence of totem ass was not an only phenomenon of ancients. It is quite possible, the totem-ass could appear in primitive clans in different parts of the world. In any case, it is necessary to explain the phenomenon of treating ass as sun divine in Old Egypt (within the aspect of rising sun).¹⁴ (Search: Myths of world nations. Encyclopedia, 2nd Volume, Moscow: Scientific edition “Great Russian Encyclopedia”, 2000. – p. 264). We have already mentioned that divine image of God Ninib in Old Babylon was associated with ass. There we proceed with reading: “The mythological image of ass is widely spread from deep ancients (in Old Egyptian representations the ass has already met from 4th millennium B.C). On the one hand the ass is a sacred animal one of hypostasis of divine being, the object of cult and etc; on the other hand the symbol of foolishness, ignorance, stubbornness, meanness, hostility, utterance, violence, absence of dignity, carnality, existence of its material corporal aspect (there are very few moments when ass is regarded as embodiment of patience, humbleness, moderateness, firmness and etc; in Buddhism ass is a symbol of asceticism, humility for the old Jew ass serves as the symbol of peace and salvation.)”.

To our mind, when we talk about totem khar, we should not take into account asses achieved by man as a result of hundred-thousand-year process of selection but it is necessary to consider ancient, wild strong willful and freedom-loving ass which turned out to be a phenomenon of great significance for social-psychological way of living of an ancient man as member of a certain clan in connection with its corporate neurosis.

The third group of words, which came out from original root or the word khar, from our viewpoint, are such notions as khor – destruction, casualty, bur and etc. It is not just a coincidence that in Greek mythology the carrier of the dead in

¹⁴ Search: Myths of world nations. Encyclopedia, 2nd Volume, Moscow: Scientific edition “Great Russian Encyclopedia”, 2000. – p. 264.

Aida has name Kharon, “he was presented as a gloomy old man in shabby rags” in underworld kingdom of dead. We review, at least, three mutually connected directions of development of senses with numerous nuances and shifts. It was totem that combined in itself the horror of death, ruin, impure and superhuman, divine. “With the exception of strictly definite with ritual circumstances – totem is completely prohibited to be touched; it is prohibited to be killed, to devour its meat or generally to be hurt or offended. All the animals of this species are regarded with great fear, respect; they are tried to be favored and wait for their mercy”, - outlines Boroday Y.M.¹⁵ (Boroday Y.M. To the question on social-psychological aspects of primitive community emergence // The principal of historicism within cognition of social phenomena. Moscow: Science, 1972. – p. 198). Later we will try to explain why there is a two way of treatment towards ass in the history of civilization.

But now let us deal with the way S.Freud’s psychoanalytical theory discovers group based neurosis in primitive mankind. In his outstanding work “The future of one civilization” S. Freud writes: “The task in “Totem and taboo” was to explain the appearance of religion as a whole, but only totemism. Are you able to explain from any famous viewpoints the fact that the first form of divine appearance was animal one, that there used to exist a ban on killing and devour of the respective animal and alongside with this there is also one time a year holiday custom of killing it and eating it jointly? That is actually the main point of totemism. And it does not make much sense to argue of the fact whether totemism should be regarded as religion. It is internally connected to last appeared anthropomorphous divines, animals-totems become sacred animals of Gods. And the first, but deeply settled, ethic restrictions – the prohibition of killing and incest – appear on the basis of totemism... - and further S. Freud points out, - So, a mother who satisfies her child’s hunger becomes the first object of love and,

¹⁵ Boroday Y.M. To the question on social-psychological aspects of primitive community emergence // The principal of historicism within cognition of social phenomena. Moscow: Science, 1972. – p. 198.

beyond doubt, is the first defender against all misty dangers threatening from the world outside, we would rather say the first asylum out of any fears.

In this function mother is soon supplanted by stronger father who secures this function for himself during the all period of childhood. There is, however, a specific ambivalence which features the relations towards father. He represents a threat by himself concerning the character of his relations with mother. So the father is a person that one gets more afraid of him rather than disposed towards him and admired by him... When a growing up person notices that he is fated to remain as a child forever, that he will always be in need of defense from powerful alien forces and he provides these forces with paternal image features, creates gods for himself, whom begins to be afraid of, whom tries to incline to his side and to whom devotes himself as to protectors” (F. Nicshe, S. Freud, A. Fromm, A. Kamu, J.P. Sartr. *The Twilight of Gods*. Moscow: The publishing house of political literature, 1990. pp. 111-112).

The original polysemantic totemic word khar or preceding, and identical to it by sense, reflected all that which was superhuman, sacred, tremendous, destructive, impure, painful, bright, burning, causing pain, joy, gladness, fear and all these, to our mind, were featuring senses of the most ancient totem-ass within a certain clan or tribe. In other tribes in the construction of ancient consolidation of the extensive system of Arian tribes it became to denote the notion of sacral. And for rather a long period of time of prehistoric period of mankind evolution in this part of the world the given system of tribes was exactly as an integral system like a unity. While providing arguments on the association of Greek mythology with civilization of our areal we proceed from recognition of Arian origin of ancient Greeks. In Old Greek mythology by Kharits, not randomly, were called at first fertility divines and later the goddesses of beauty, gladness the embodiment of female charm. But alongside with this we should take into account specific historical role of the tribe possessing this totem in the existence of other Arian tribes. The word khar denoting ass conserved in some nations and this, to our mind, evidences that it is their very distant forbears had ass (khar) as totem and

that it is they who made at that very distant time a decisive influence on the genesis of ancestors of the following creators of Old Indian and Old Greek and Avesto mythology and other spiritual foundation. We rely on the fact that totemic representations are the most ancient moral representations as the word denoting the given totem.

The well-known linguist avestologist Bobonazar Gafurovich Bobokhon, who I addressed to for consultations supported my hypothesis and paid my attention to the existence of an ancient cosmogony – in Avesto, according to which deep in the middle of the world ocean – the Varukasha Lake there is an ass, which is considered to be an “arta” one (Arta in Avesto language means heaven order). It is said, in late Avesto, that clotted milk has only she-ass and mare. Particularly for this article he translated from young Avesto language the following: “We honor Khara – arta, who is located in the middle of the lake Varukasha”¹⁶ (the translation of the word Khara from the Avesto means “sacred ass”; Avesto, Yasna 48, 4). “Both mare and she-ass has the clotted milk”¹⁷ (Avesto, Neirangistan, 67). All this evidences of the existence in ancient times of cult “sacred ass”, the echoes of which were reflected in Avesto. (Avesto word Kharu begins with latter combination Kh).

Totem with its ideas of taboo – prohibitions should be differentiated from the system of various taboos and ancient society, which existed at the time and that appeared afterwards. Psychoanalytical theory, in any case, is a pioneer within exploration of more archaic presentation of totemism. The interesting point that we met in James Frazer’s remarkable book “Golden Branch” about “Taboo on objects” mostly deals with another aspect. To our mind, the genetic basis of all prohibitions are totems tabooing different animals. Undoubtedly, these questions require some additional special investigations. The main idea of the article is that it, first of all, sets up a problem and outlines some ways of its solution. However, from our viewpoint, the most ancient presentation of taboo was collective neurotic

¹⁶ the translation of the word Khara from the Avesto means “sacred ass”; Avesto, Yasna 48, 4.

¹⁷ Avesto, Neirangistan, 67.

substitution exactly by an animal but not an object and this associated the archaic forms of human kind existence.

That is why we consider that the term khar or perhaps any other more ancient linguistic root, denoting this totem and which transformed into term khar, in other direction thousands years later – into the word Khvarna in a sense of bright or sun (Khurshed), and for many thousand years exactly under the sense of archaic totem-ass was the most ancient polysemantic notion. It was associated exactly with this animal due to the extraordinary peculiarity of human kind genesis among the extensive system of Arian tribes, which after a long term period of integration split into other tribes and peoples. After a long time the clans and tribes, in fact having not admitted a new totem, though having accepted and conserved a certain part of senses of the ancient word developed its different modifications in following mythology and various directions concerning civilizations and languages which differ from each other. There past very much time before there arose, for example, religious idolization of the sun, and emerged other divines, the terminological designation of which inherited a term with the stem “khar”. There, perhaps, was any other far earlier root which preceded the terms khar, khvarna, khor, but it, by all means, denoted the totem-ass. This all requires some special research. But it seems convincing to us and corresponding to psychoanalytical theories studying totem and taboo, that the totem with the given root in name is more ancient and archaic.

The hypothesis requires some accurate scientific research with attraction of structuralism and psychoanalytical theory, linguistics, phonetics, literature and in general anthropology for discovering unusual events and processes of far prehistoric time. The only thing that I pretend to is an unusual conjecture and statement of problem which are far from our ancient totem which demand basic investigations and sufficient scientific arguments.

The history pasted a long way from “sacred ass”, let us recall Apuley’s “Golden Ass”, up to insulting ass – “khar”. It is not surprising. Since, at prehistoric times, the foul language, in some other forms, was the expression of positive

relationships. We should notice some historical metamorphoses in it. Therefore I rely on reader's prudence, since there is quite a number of other totems for offence.

Before editing the article, I addressed myself to the luminary of domestic science, two of them disagreed with me. I would like to express my great and sincere gratitude to them and to those, they turned out to a bit more, who supported my searching. The academician Nugmon Negmatov and corresponding member of the Academy of Science of the Republic of Tajikistan Yusufsho Yakubov provided considerable assistance by the consultations on Avesto, but it is a celebrated scientist, linguist and translator of Avesto Bobonazar Bobohon supported the hypothesis and found some fragments in Avesto, to a certain extent corroborating its facts. A considerable assistance in historical periodization of the most ancient events we are talking about on the basis of the given hypothesis provided by doctor of historic sciences, the corresponding member of the Academy of Science of the Republic of Tajikistan, a well known throughout scientist Ranov V.A.

Totemism, associated with ass-totem, obviously, deep in the same ancient period began to be overcome and restricted thorough domestication of ass and other animals. The man soon became the master of ass as domestic animal and here is, in fact, scornful treatment towards selective ass which is particularly vividly displayed nowadays in our city-based extremely urban culture. Starting from this period, impurity was associated already not with totem, but with ass as domestic animal, losing the notion of sacredness. Horse was not "honored" this contempt due to its evident biological accomplishments in comparison with ass selective. I am pointing this out because of the fact that trails of totemism are not observed clearly today. (The clear evidence for this may serve the prohibition of using ass's meat).

We should take into consideration the fact of early appearance of the urban culture in the above mentioned civilizations for the explanation of the scornful treatment towards domestic animals; however the successful coexistence with domestic animals in ancient cities is also very well-known fact. It is more likely that the double treatment to ass as ancient ambivalent, associated with taboo (S.

Freud) intensified afterwards as a result of its domestication in a sense of impure. That was a period associated with the beginning of emergence of different other forms of moral prohibitions, spirituality, mythology, clan based and tribe based formation, shortly saying, of the ancient society. To our opinion, the transformation of any hypothesis into a proved theory depends on the participation of scientists of different directions. So once again, the value of the hypothesis is not in “calling” ass by totem, most of the animals were totems, but in that exceptional role of most ancient clan and tribe – the bearers of the given totemism – in all historical influences, of further forming of mythologies and generally civilizations we were talking above.

Eventful history of Arian and, first of all, Iranian peoples in considerable way moved back in the past, for thousands and thousands years before emerging of Peshdodids and Kayenids, who lived approximately three thousand years BC. Assuming the fact if our theory turns out to be right, we can observe, poorly and one-sidedly but at the same time rather definitely, the picture of phenomenal rise of integral genius of the Iranian tribes forbears in unimaginably far time – the period of integration of other Arian clans and tribes.

This perhaps was a period of the emergence of proto-state which was a huge, by its scale, organic integration of most of the Arian clans and tribes at the time, with different totems bowing to a leading “devine”, and then again divided into various branches of development. This evidences also a fact that primitive clans, yet at the period of archaism, were capable to extremely tremendous and organic integrations. We can explain such a wide spreading of nearly consistent terminology in completely different modern civilizations only by the entirety which appeared dozens thousands years ago of new society.

To our mind, there cannot be unpurposed double coincidence: **the words do not only coincide phonetically, but also coincide semantically, denoting something sacral, meaningful, substantial, and superhuman.** Alongside with this, we assume, the most of the words over thousands years used to transform, but the terms, denoting something sacral were more steady, they underwent some

slight alteration or differentiation, though saved the main root – “kh – r”, moving from one spiritual and religious system to another. Alongside with above mentioned, we should also raise an issue on ancient ambivalent concept-term, which later, perhaps, delaminated into opposed though mutually connected terms and notions, such as Akhurs: Akhura-mazada and Akhra-man. They also, perhaps, are the presentation of later stratification of ambivalent and consistent concept of the most ancient totem having the root “kh – r”. Some specialist-linguists consider all this to be impossible and contrary to the principles of language evolution within the context of our areal, though it all comes from the logic statement psychoanalytical comprehension of totemism within the context of exploration of ambivalence of the most ancient terms and notions of archaic period. One can easily suppose that the root “kh – r” was much more wealthy by its polysemy. Even if it is not like this, anyway the issue on archaic ambivalent word delaminated afterwards into contrasting notions of antagonizing Gods and forces should be raised. However, it seems rather confusing that the scientists recognized totemism as the most ancient human kind statements (presentations).

We suppose that the ethnos under concern, in archaic time, was represented by the only clan, they were much more in number – together with totems of horse, or tur– primitive bull and others. In different times a certain clan was moved forward to the forefront with the notion of its totem. It is very likely the way of introduction of political and geographical notion of Turan. The vast areal of later period was given the name of another ancient totem – tur, in connection with a special military-integrating role of the totem bearers during another stage of evolution of the given ethnos. It should be also paid attention, the origination of the Russian words “khorosho”, “khoroshiy” (meaning well/good), the etymology of which, to our mind within the context of our analysis, additionally confirms the Arian origin of the Russian, who, probably, also had relations to those distant events and clans – bearers of totemism, associated with totem ass – khara, kharu or khar. This was pointed out to me by the well-known linguist Bobonazar Bobokhonov.

Some special psychoanalytical, structure-based, anthropological, linguistical research should be directed towards studying rather specific history of archaic period of our history. It would considerably enrich the archeology and history of that period. The primary assignment of modern research is not to deal with stating only the fact that there was totemism, totems and then myths, but to indicate, rather definitely, to the character of the events which took place exceptionally far back during the period of archaism of primitive clan-based community and tribes.

Totemism as an archaic level of human being world-view, which gets escaped out of biological determination and moves to genuine human kind evolution dozens thousands years ago, was associated with different animals. However, due to some special conditions –within the activity of totemism bearers there took place the events which had a great impact on late civilizations. Ass, in Old Jewish tradition, appears as a sacred animal of judges, kings, prophets, Balaam's she-ass turned out to be not only wiser than its master, but also an accomplice of the angel, performing God's will. The plot of religious, Christian pictorial art of great value is Jesus image of coming in Jerusalem ass-back (World Nations' Myths, ibidem). Being so popular as "sacred ass", we can suppose, totem – ass appears simultaneously in different parts of World. There arise some questions in this case: why exactly the "psychoanalytical" situation of an archaic man, which takes place regularly, is undeliberately associated with this animal. If it is not like this, if this totem was historically unique and all above mentioned about the bearers of this totemism, obtain the features of reality. The later is more obvious due to the fact that designation of "sacred ass", its sacredness, divinity in other civilizations is represented through terms, having root "khar" which are directly associated with the most ancient and modern naming of ass in Iranian peoples' languages.

Totemism, totem-ass originated dozens thousands years ago, however the integration of Arian clans and tribes with the most ancient forbears of Iranian peoples we are talking about within our hypothesis, from the point of view of historian and chronographer who supported the hypothesis Ranov V.A, happened

later, but long before the events reflected in Avesto and other ancient records of history and culture. Ranov V.A. assumes, it took place long before the arrival of Arians to the Central Asia. To my mind, it is quite possible the very names of the most ancient Iranian peoples' forbears emerge long before Arian tribes and peoples. It is they who gave the name to Arian clans and tribes as a result of long term integration of these tribes by them had a great influence on their ethno and socio genesis. The Arians originated as related especial group of peoples under the influence of the ancient integrative actions of distant forbears of Iranian peoples.

It is impossible, within one short article embrace all questions relating this theme, but our assignment is to make an attempt to set incredibly interesting issues and we believe it would be legally acceptable. Totem has been forgotten and the point is not, actually, in totemism, but in that exceptional role of its bearer during the epoch of archaism and study of specific history of our forbears at the time with the help of psychoanalysis, ethno-linguistics, structuralism, anthropology and other sciences which are to supplement archeological investigations and historical science as a whole.

2003

Bibliography

- 1 № 26008 of August 7, 2012 г. Source – Moscovski Komsomolets. Internet address of the article - <http://www.centrasia.ru/newsA.php?st=1344407820>
- 2 Boroday, Y.M. To the Issue of Socio-psychological Aspects of the Emergence of Primitively Ancestral Community. // The principle of historicism within the cognition of social phenomena. – Moscow: Nauka, 1972. – p.198
- 3 S. Freud. Totem and Taboo: Coll. Moscow: Olymp; JSC “Publishing House AST – LTD”, 1998 – pp. 88-89.
- 4 Dictionary of Mythology. Moscow: “Soviet Encyclopedia”, 1991, - p. 585.
- 5 Max Weber, Selection. The image of society. Moscow: Yurist, 1994, p.

102.

- 6 “The Oxford Dictionary, Oxford University Press 1996» the following explanation is given to the English word charisma: “ecclesiastical loan from Greek kharisma, from kharis...”, it should be pointed out the Greek words begin with letter kh.
- 7 Search: Myths of world nations. Encyclopedia, 2nd Volume, Moscow: Scientific edition “Great Russian Encyclopedia”, 2000. – p. 264.
- 8 Boroday Y.M. To the question on social-psychological aspects of primitive community emergence // The principal of historicism within cognition of social phenomena. Moscow: Science, 1972. – p. 198.
- 9 the translation of the word Khara from the Avesto means “sacred ass”; Avesto, Yasna 48, 4.
- 10 Avesto, Neirangistan, 67.

IskandarAsadullaev (website: researchgate.net—the article was elaborated in March, 2016);

Source -CenterAsia

Permanent address of the article - <http://www.centrasia.ru/newsA.php?st=1459665840>

The multiformity of the "observer" as the pinnacle of concentration. The fantasy is sometimes in advance of scientific discoveries, -I. Asadullaev

09:44 03.04.2016

The multiformity of the "observer" as the pinnacle of concentration.

The two great tendencies of the Universe.

The fantasy is sometimes in advance of scientific discoveries. As the same thing took place with a hyperboloid of Engineer Garin, so I suppose it may happen with Stanislaw Lem’s Solaris or something like that. An artificial decrease of the search of planets similar to the planet Earth is explained by the fact that over the last several decades it was expected to find something or someone like the person (an observer) with a diverse number of modifications. That was very well reflected in a variety of fantastic monster characters depicted in the movies, but still physically similar to a person, his vicious and wicked modification. The search for

life in the universe is extremely lent out. People have searched for planets similar to ours by climate, geology, atmosphere and etc. But we will try to show the "observer" (scientists use this name for "homo sapiens" in physics and astrophysics) on a multi-valued basis, as well as we turn to such a foundation of a person, as the concentration.

The speech here is about two great tendencies of the universe – decentralization (entropy, the expansion of the universe, and etc.) and centralization or concentration. It may seem that we are taking a step towards religion, but that is only at first sight. From the very beginning it is necessary to mention that all further judgments are based on the recognition of the fact that material and ideal are considered as attributes of the matter – on the unity of determinate and ideal being which do not reproduce each other, but in the rest are tend to be, at times, the primary or, sometimes, the secondary in relation towards each other by its influence¹⁸.

From our viewpoint, the mind, the observer are not connected strictly to the person, they are not only a function of the individual and society - social form of the development of the reality. A human being is merely one of the forms of the "observer" in the universe. In other words a human is one of the numerous universal concentrations of the ideal as an attribute of matter. It is accompanied by a limited concentration of material - determinate being. Let's consider, first of all, for this purpose one of the two global tendencies in the universe - the concentration, along with decentralization.

The concentration is diverse and that occurs very well in formation of stars and galaxies, matter and fields, black holes, micro particles, macrocosm and mega world. Time and space, the biosphere and the human world are subjected to it. The speech is essentially about the fact that different foundations and forms within their development end up to single results.

18Asadullaev I.K. New Materialism // Being – the symphony of dissonance. – Dushanbe: AR-graph, 2014.

Jens Bjerre's notices are remarkable in this case: "If we could see, as if in a magic binoculars, the entire history of the Earth, compressed and squeezed into the framework of one year, then it would turn out like this:

For the first time, in November the simplest forms of life appear – amoeba, lizards, mushrooms. In mid-December there appear giant animals, and a quarter of an hour before the New Year, at about 23.45 at the New Year's Night, the first person comes up to the stage. The whole period of our era takes only the very last minute of the outgoing year sixty seconds..."¹⁹. Jens Bjerre draws attention to the time compression of innovations on the Earth. The author points out a little above that: "In order to take a glance of humanity and fauna of our planet, let's see how the Earth had been evolving.

More than three billion years ago a glowing clod, rushing in interplanetary space.

Two billion years ago. The clod gradually gets colder. The steam wandering in the atmosphere converts into water. Oceans start to appear.

One billion years ago. In the process of chemical exchange protoplasm is born which promotes the emergence of the first living beings and microorganisms in the oceans.

500 million years ago. There appear the first species of the simplest cellular animals, amoeba and algae in the oceans.

220 million years ago. There start to develop primitive plants on the Earth. Some large animals which used to inhabit the oceans (amphibians), move to the land.

200 million years ago. There emerge huge reptiles, lizards and dinosaurs.

90 million years ago. Mammals appear.

70 million years ago. New animals and plants appear.

25 million years ago. Gigantic animals extinct, but elephants and rhinoceroses live. There are new forest beasts, bison and big anthropoid apes.

¹⁹(Jens Bjerre. The lost world of Kalahari .Print house: M., Mysl, 1964, chapter two, <http://rgo-sib.ru/book/kniga/133.htm>)

A million years ago. Similar to humans apes settle in caves.

500,000 years ago. Similar to humans apes take up a stone or a stick.

100 000 years ago. The Stone Age human beings come out. They begin to learn to use fire.

50,000 years ago. There start to form various human races.

About 2,000 years ago. The era of the Christian chronology begins

15 years ago. Man subdues the atom energy.

One year ago. A man can destroy all flesh; he can launch artificial moons on the orbits around the globe.

In the future. People bring cosmic space under their control and land on the Moon. "

The acceleration of the development or the concentration within time is more important for us, rather than the details which were supplemented and partially changed since Jens Bjerre's book was released.

B.F. Porshnev also paid a great attention to the time acceleration, pointing to more and more shrinking existence time of social formations²⁰.

The history of the nature and the earth is concentrated within time in terms of the emergence of innovations, that is, the observer - a person is a pinnacle of concentration in the aspect of Planet, as one of the two main tendencies: the dispersion or deconcentration (entropy, the expansion of the Universe) and concentration – negentropy, aromorphosis. What is the difference of a person as an observer?

First of all, by the fact that via the observer the matter accomplishes its reflection – it refers to itself, that is essentially the transparency²¹ of the matter in the process of cognition and self – cognition. It should be mentioned that all types of the transparency are, ultimately, the transparency²² of the matter for itself in various localities and fragments. The transparency is a global process, that is at the level of life and a human being is, essentially, a developed, forward-looking reflex

²⁰Porshnev B.F. Feudalism and the masses of people. – Moscow: "Nauka", 1964.

²¹Ozhegov S.I. The Russian language dictionary. Edition 18 / Moscow "Russkiy Yazik" 1986. – p 529.

²²Georg Wilhelm Friedrich Hegel. The science of logic. Vol. 2 / Moscow: «Mysl», 1971. – p. 10.

- reflection. On the one hand the transparency turns out as a primitive reflection, on the other—cognition and self – cognition of the matter in the form of the observer - a person.

The observer comes out as a result of the implementation of the universal tendency of the development concentration, the apex of which in the world is the mind.

With the help of the force of his thought a man penetrates into the essence of the world²³, its structure, the nature of laws, changing the humanized nature according to his standards - his "image." At the same time, the extraordinary richness of the universe penetrates the human consciousness, and concentrates in it in a perfect shape. The matter creates a social form of motion and through human action it creates the conditions under which it begins to concentrate itself in perfect shape, i.e. locality tends to become universality, but it does not reach all its infinity. Matter - the objective world tends to concentrate in the human mind in a perfect shape. This tendency is mediated and determined by the necessary emergence of the social form of the matter motion, the emergence of the creative activity of consciousness, creating reflection of the universality of the objective reality.

It is a peculiar universal process of the concentration of the matter²⁴, space and time in the form of "otherness" (not in the Hegelian sense) in the human consciousness. With the appearance of a person in objective reality there emerge new relations and manifestations of transparent and opaque. In our opinion, this is not a fluctuation, not random and only the local process. If the anthropic principle suggests non-randomness of the observer emergence, the occurrence of who is commensurate with the fundamental constants of the universe, we should talk about the proportionality of the universe and a new level of arising correlation between transparency and opaque represented by man. Man is, perhaps, local in the universe as not the only case of the origin of the mind (although this is not proven,

²³Georg Wilhelm Friedrich Hegel. The science of logics. Vol. 2 / Moscow: «Mysl», 1971. – p. 7.

²⁴The Anthology of world philosophy In four volumes. . Vol. 1, part 1. / Moscow: «Mysl». – p 333.

as it does not prove the opposite), but the process of the ideal concentration of the infinite wealth of the objective reality (universal concentration) in a person's conscious is not local, as well as the formation of the ideal - immaterial - transparency is not local at a certain stage of the development of the matter²⁵.

Man, it must be assumed, is one of the forms of embodiment of the universality, generality, when both space and time, the objective reality tend to concentrate in it in an ideal shape. This is just one of the objectives mediated by the emergence of the social form of the matter motion. That is the exact thing scientists are trying to discover at the present time with the help of telescopes and other devices - similar to the Earth trends of concentrations in the universe. They are merely trying to find one of the universal concentrations in the world.

If the universal concentration cannot happen physically, energetically, in another word, materially, it is supposed to happen in an ideal shape, and that is objective. In this process of concentration of the universe there happens a kind of "otherness" of its material concentration. That is, we can see the opposite massive tendencies. One of them is the increase of entropy and the expansion of the universe. The other one – is the tendency of the material concentration in the form of the formation of stars and galaxies, heavy elements, negentropy and one of its peaks - the concentration of time and space in the development of biological life on Earth and the humanity in all its manifestations (the acceleration of innovations in the biosphere, the acceleration of historical time, urbanization, the concentration of economic processes - globalization, the Internet, etc.)... The problem of isotropy (uniformity) and anisotropy (heterogeneity) of the universe is adjacent to this aspect, but it is more considered in a completely different key.

In addition to this, there appears a question: Are these opposites of deconcentration (dispersal) and the concentration (centralization) equal in the present time – in the synchronous aspect? The fact is that the matter is

²⁵About philosophic categories of transparency and opaque and their dialectics. Toward the statement of the problem. The Journal of the Russian Academy of Science Presidium. «Philosophic issues», N/10, 2005, 116-129 pp.

heterogeneous and there are unequal, nonequivalent factors of interaction, particularly in the biosphere, there are diverse organisms: some of them represent a factor of the strong impact, the other ones - a factor of weak impact in the process of confrontation and mutual absorption in the biosphere²⁶.

If the opposites are identical, in the issue under the consideration, and in some other sense, include the diversity, which was mentioned by us, that is still they are eventually equal at present in the universe - in synchronous aspect, that means the person must be one of the most important parts of the process of the concentration in the universe. He is not alone in the universe and there exist some potent tendencies of "anti-big-bang" – the most complex system of the world concentration of the objective reality, including an integral part of the universal process of the emergence of life and mind in the universe. Life as a concentration does not only possess familiar physical and biochemical basis but also some other forms, which do not narrow down to a human observer.

There turns out an interesting phenomenon: the observer as the pinnacle of concentration possesses numerous other forms of concentration on the way to himself. Life on the Earth and the observer are just one of the universal perfect pinnacles in the universe. It is necessary to search for not only the similarity of life in the vast space, but also alternatives of the universal material and ideal concentration.

If the oppositions are not equal, that means the ideal form of the concentration of the world in human consciousness is just a weak reaction of the dialectical world on the entropy processes, extension, dispersion, and a man represents just a "poor imitation" of the universal concentration – nonequivalent opposite reaction to the ongoing theory of "first bang". In this case it is necessary to explore the expansion of the universe - deconcentration as the dominant universal process of the objective reality accompanied by weak concentration, and we are dealing with a universal asymmetry. It manifests itself in the transition from primary concentration in the instant of the explosion "first-atom" to the dispersal of the universe. Or is it a kind

²⁶Pierre Teilhard de Chardin. The Phenomenon of Man. – Moscow: «Nauka», 1987.

of symmetry, unfurled in time - in the diachronic aspect? All of these issues, if they are appropriate, require an overall study, especially by physicists, mathematicians, astrophysicists and philosophers.

But if there is an opposition which is equal to it and it currently manifests itself in something else, so it is necessary to seek an answer to the question: what exactly is identity of opposites manifested in, under their diversity? The speech here is not merely about the concentration, but about a system of the universal concentration, if there is one and it currently continues, as opposed to the theory of the "first bang", entropy, and the expansion of the universe. Or the speech should be about the universal process of the concentration in the form of pulsations of the Universe in the future (?), or the idea that dialectics is not universal which we suppose is completely absurd. If dialectics is universal, it is extremely sophisticated by its peculiarity of infinite manifestations and we have to find answers to new questions. The most important question is: what alternative forms of universal concentration of the ideal (and possibly material) exist in objective reality? In other words, what principally different life forms exist, in addition to the one we know?

We proceed from the unity of material and ideal as the matter attributes. The transition from the singular state to the "first bang" and the expanding universe denies itself in the opposite tendencies of the material concentration and, along with them, there occupies a special place and ideal concentration of the objective reality in people's consciousness - their special world. Here we may come to a conclusion of "inclusion" of a human being in very large-scale processes of the universe²⁷. On the other hand, the study of the categories of transparent and opaque tends to the above mentioned idea, expressed by scientists on the basis of the anthropic principle.

The observer represents the pinnacle of transparency of the matter in relation to himself. Moreover, not only in the form of specific earthly life, but on the basis of many fundamentally different foundations of the concentration.

²⁷Moiseev N.N. Vernadskiy and the Modern Time. – Philosophic issues. 1994. №4. p. 13

At the confluence of the interaction of philosophy and other sciences there tend to occur some issues that require further thorough studies ²⁸ . We have mentioned above of the possible non-equivalence in the modern universe dispersal tendencies (deconcentration) and the concentration (centralization) - the global asymmetry. For instance, a famous British astrophysicist P. Davis notes that "... the universe is asymmetrical and there is no significant amount of anti-substance. The universe was formed with a slight excess (about one billionth of a proportion) of the substance, and it is this excess that emerged at the beginning of the expansion influenced the fact of appearance of galaxies, and sentient beings"²⁹. This idea allows the possible nonequivalence, asymmetry and diversity of such opposites as dispersal and concentration of the universe.

The process of concentration is essentially a global process of transformation of matter into a transparent process in relation to itself, and is not limited only to the forms of life we are familiar with. Life is one of the forms of the universal concentration of the ideal and transparency under the local concentration of material.

Transparency exists everywhere. At the level of inorganic nature, bios and human beings transparency is an outstripping reflection, and at the level of a human being - this is the cognition, the concentration peak, along with other forms of universal concentrations. We cannot witness a fact without an idea. The statement of a question of some alternative forms of the universal development concentration may become the basis of the observer searches on fundamentally different principles.

The universal concentration of the ideal, accompanied by a limited concentration of determinate being of the material as an attribute of the matter does not only happen in relation to a human being. There may be other forms of the

²⁸Bazhenov L.B. About the status of the anthropic principle in cosmology // The universe, astronomy, philosophy. - The printing house of Moscow University. 1988. - p.90

²⁹Paul Davis. The Accidental Universe. / Moscow: «Mir», 1985. - p. 125.

concentration, when the ideal becomes universal at the local concentration of the material, and the observer is not limited here only to human beings.

For many decades "the common sense" does not allow a "wacky idea" of the existence of the ambiguousness principle in quantum mechanics, the unity of subjective and objective, the unity of the microcosm and the observer. Some people just believe that scientific studies are not adequate enough. However, the aspect of the concentration research in the universe leads to the formulation of new issues and quite reasonable wacky ideas.

According to the anthropic principle³⁰ the universe allows the emergence of bios and a human being (the observer)³¹ exactly under such its dimensional characters, but it, at the same time, allows the concentration pinnacles as one of the two great development tendencies - dispersal (deconcentration) and centralization (concentration). The appearance of a person (the observer) is more fundamental phenomenon than it might seem while glancing at it as a lost fluctuation. This also regards the pinnacle of other concentration forms.

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³⁰The opposition of anthropic principle or universal anthropic principle/ the statement of a question of the existence of philosophic categories of acceptability and unacceptability, uncertainty and certainty. The structure of time. LOGOS – 2010: The collection of scientific articles under the edition I. A. Vasilenko. – M.: the editor A.V. Vorobev, 2010. – 172 p. – p. 153-172. On the websites: "physics without mathematics" and "new physics theories", the department of sociology of the Moscow State University: "Pitirim Sorokin's fund". New philosophy categories and the philosophy of politics / Dushanbe: «Donish», 2006.

³¹Look up.: Martynov D. Y. The anthropic principle in astronomy and its philosophic significance // the universe, astronomy, philosophy. – The printing house of Moscow University. 1988. - p.63

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