

On Human Cognition of the World

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Summary

In the introduction, called as "Is the world perceived? What is the truth (absolute and relative)", there is briefly considered the question about the cognition of the world and three possible replies on it. Then there is briefly considered the relation of the Christianity to these problems. Further in the main part of the paper there are three known replies on the question "What makes our mind to be able to cognize the Universe?" - 1) Biblical point of view [the creation by the rational (more exactly, super-rational) God]; 2) The atheistic (materialistic, naturalistic) point of view [the "creation" by the irrational randomness]; 3) The point of view of cosmic humanism of "New Era" [the universe as a conscience, as the creation of our mind]. Their analysis is given. Then there are given the methods of the test of the knowledge truth and together there are presented the notions of view-world, philosophy and religion. Further the methods of the test of knowledges are given. And at last it is said on the notion of the Truth in the Christianity. Then it is given the detailed presentation of realism and anti-realism in the philosophic notions of the scientific realism, already entered also in the Christianity. Further it is given the inter-relation of knowledge and faith. After that it is presented the mutual complementarity of science and theology, and together it is said on the co-existence of 3 classes of paradigms in different sciences (firstly considered by author) – on the natural paradigm in the natural sciences, on the paradigm of the inclusion of the artificial facts as the creation of the human intelligent design in archeology, criminalistics, medicine and mathematics, cybernetics, informatics and even in humanity history, economics, political sciences and finally in the origin sciences and the Universe and biologic life history, in which there are appeared two cardinaly different paradigms - the atheistic (evolutionistic) paradigm and the Christian paradigm on the highest Intelligent Design of the Super-natural Personal God-Creator. In addition, so frequently used by atheists such criteria of the separation of science and pseudo-science as observation, reproducibility, refutability and predictability etc by far not always can be fulfilled in modern real natural sciences. So they are not obligatory. Then it is established that absolutely all methods of the scientific researches are the fruits of the human intelligent design, created in the Divine image and similarity. In conclusion, it is shown the inconsistency of so called "scientific atheism" (firstly proposed by author) because it contains, in particular, such statements: 1) All data of modern science univalently witness that science had not proved and cannot prove principally the absence of God and the transcendent world or that all reality can be explained by physical, chemical, biological etc natural sciences. 2) The belief in that more simple matter forms can product from themselves by self-complication and self perfection more complicated forms. In this case the writer L.N.Tolstoy had said very well: "Materialism is the most mystical in all the studies. It sets as the base of everything the belief in the mythological mater, which creates and originating everything from itself" and also the philosopher A.F.Losev, who had said that science behaviors as the fabulous baron Munchhausen, who pulls himself by his own hairs from the water. But if all the enigmas are solved and all the mysteries are revealed, then for what serves science?"

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1. Introduction: Is the World Perceivable? What is the Truth (Absolute and Relative)?

To cognize the world, which surrounds us, is one of the main human needs. Besides the biologic needs, there are also the spiritual needs - in the communications, in the cognition of the world, in the creation etc.

One of the frequently discussed philosophic problems is the problem of the cognition of the objective world: is the world perceivable and how does it exist itself, independently from us? There are three possible answers:

- 1) the world is *perceivable* and we can obtain the true knowledge about the world (the human *cognoscibility* of the world);
- 2) the world is un-perceivable (*agnosticism*);
- 3) we do not know if the world is perceivable or un-perceivable (*skepticism*).

The first reply is typical for any true scientist and, moreover, it is one of the axioms of the scientific thinking. And the result of the cognition is *knowledge*. The knowledge can be conditionally classified as the everyday one (obtained during namely our life), scientific (rational), the view-world knowledge, philosophical, theological etc. However it is not possible to separate always clearly the boundaries of various knowledge classes. The same first reply the Christians always give.

In the Christian view-world men can perceive the surrounded us world and also God, since God gave us such capacity and actively communicates with us. In the base of the human cognition the character of God-Creator rests. We are created in the Divine image and similarity in order to govern it from His name and in communication with Him (Genesi,1:27-28). But if God is omniscient, we can only partially and time from time obtain some events of the reality.

Rather frequently we hear in the human communication: "Our knowledge reflects the objective reality" or "Our knowledge can contain the truth or err" or "our knowledge can be the knowledge by truth or by the opinion" etc. And what knowledge, on what is it based, what is its origin and why does it contain the truth but not always?

In many dictionaries and encyclopedias in many languages (see, for instance, [1-4]) the word *knowledge* (about something) is defined as (1) *the result of the cognition process, expressed in the notions, judgments, conclusions, conceptions, theories* and concretely obtained in the theoretic activity of the human mind, which has the pretension on the objective truth during the *study, research, thinking, communication* or in the result of the *intuition* (which is comprehended in various ways in various view-worlds), *revelation* (which is recognized by several world religions); and also as (2) the synonym of the word *comprehension*.

What is the *truth*? Between various replies on this question it is possible to numerate such ones: 1) *the accordance of the knowledge with the reflected by it reality*; 2) *the knowledge which is truly reflects the reality*; 3) *the reality or the actuality, or that which "is in fact, indeed"*; 4) *in the biblical thinking that is true, which originates from God and is affirmed by Him in the life*, i.e. the truth is perceived in the right relations with God and the nearby-s, it is faith and fidelity to Testament, it is the origin of the true human freedom, obtained as a result of the serious efforts. All these replies do not contradict to each other, but partially intersected and added to each other.

The radical skepticism during obtaining the truth separates the mind by parts by means of doubts and must be rejected. Moderate skepticism → "trust but check", "*everything test and hold to good*" (1Fess.,5:21) is reasonable in the sense, that we must not be credulous. There are the truths which can endure any critical checks. They are named *absolute* (more exactly, they are the fragments of the absolute truth). They *are perceivable*. Sometimes by the mysterious way (particularly those, which are revealed by God through prophets).

If the absolute truths would not exist or would not be perceivable, then we could not talk at all about any truth, including the relative one. The relative truths exist only therefore and only insomuch because and since the absolute truths exist! And the separate absolute truths can be ordered from the truths of the less scale to the truths of the large scale, and in perspective – to the unique highest absolute Truth.

In natural sciences (i.e. in obtaining knowledge by means the experiments and thinking, or by means of the nature "tests") we obtain the relative truths. Absolute (*eternal, i.e. out-of-time, imperishable*, the highest) Truth does not principally become out-of-date. The direct origin of it is from God.

Its fragments are opened by the inspiration from above – through the revelation of God (as to Adam and Eve and the biblical prophets) or by the intuition. Everyone from us from time to time experiences the larger or smaller illuminations by Truth (or its fragments), and often directly, intuitively, without the logical justification. And at all, during cognizing the world always it is necessary to proceed from something, i.e. we must have the *starting (original) knowledge*. This knowledge the men obtain or through the Divine revelation (the biblical prophets) or by means of the *intuition*, under which one can understand the ability of the direct (without proofs) perceiving (the revealing of) the truth. Usually two kinds of the intuition are marked: (1) the empirical intuition as the direct feeling of a certain real object and (2) *the rational intuition* as a direct feeling of a certain relation between some ideas. The empirical intuition is very similar to the revelations of God to His prophets. An example of the rational intuition is the intuitive seeing of Mendeleyev and “momentary snatching” of the geometrical proofs,...

In fact, in the Christianity there is assumed that finally all the forms of the human knowledge originated from the Divine revelation – *general* (opened for all the men) and *particular* (opened after the birth from above). Or, in other words, we know *two Revelations – Divine Creations*: general – Nature (Universe) and particular – the Divine Scripture (the Bible). Science is one of the forms of the human interpretation of Nature (namely, the most irrational). Theology is the human interpretation of the Bible. Both scientists and theologians can mistake and are mistaking. Errors, mistakes and lie are present also in other knowledge forms (in particular, obtained through art and everyday form of conscience). Errors, mistakes and lie are characteristic for our world after the human Sin-fall.

2. How Different View-Worlds Replies to the Question “What Does Make Our Mind to be Able to Perceive the Universe?”

That the human mind can understand at least something of nature is almost obvious to everyone. Let us recall A.Einstein who said: "The most incomprehensible thing about the universe is that it is comprehensible". But what makes our mind capable of learning about the Universe? At least, three different answers can be found to answer this question.

(1) *The Biblical point of view*: God, who created the Universe, created man (human mind) in His image and likeness.

That is the reason we are able to learn about the Universe and rule over it according to His will. In other words, the Universe is learned, because of the correlation between rationality in nature and rationality in men established by God.

(2) *Atheistic Scientism*: Scientism (according to which all in nature and in human being can be learned and explained by scientific rational method) turns out to be contradicting within itself from the very beginning by presupposing that behind creation of the cosmos and man it is a blind (i.e. pure irrational) chance. How can the human mind learn about the Universe if the Universe in its core does not have any rationality? How can an irrational Universe be understood with rational thinking? For some time though, some visible order of the Universe was understood in human rationality as the product of pure chance. But after Freud it became impossible to believe that even human beings are absolutely rational. In principle, scientism appears to be an inwardly self-destructive philosophy! For this reason, some scientists (ex. Einstein) have been led by the process of learning about the Universe back to a belief in rational creation by a Superior Intelligence.

(3) *New Age mysticism*: New Age worldview postulates that human personality in its essence is God's personality which itself creates the Universe. This is our ignorance that makes us attribute independent and absolute reality to the world. And if I am not a helpless individual but am the heart of my Universe, then most of all I need to open not the secrets of the physical universe but the secrets of myself. Hence, real spirituality consists in the fulfillment of its own potential. The general, rational consciousness which we use in our everyday activity appears to be a little part of the whole.

New Age idea says that by means of definite mystic manipulations it is possible to leave the limited experience of rational consciousness and enter into an extended, cosmic consciousness which embraces all. However, the true mystical experience gives us non only the feeling of our unity with cosmos but also the emptiness and dismissal, and does not respond any human answer. Therefore it does not fulfill claims of those supporters of New Age which seek the best world but not the isolation from the world.

The door into the mysticism of New Age can be opened not only by pseudo-science (with combination of pseudo-theology) but also by real difficulties in interpreting new results in the developing science together with its failures (problems that have not been solved for a long time). The complicated history of the development of science contributes to that as well.

(Let us recall a conflict between science and non-biblical dogmas in the Middle Age church, interest in "scientism" extensions, on the one hand and Oriental philosophy and religion on the other hand).

Founders of the physics of the 20th century M. Planck, A. Einstein and other physicists, having no doubts about the existence of real nature outside of the mind of the scientist, recognized that there are at least three types of reality: (1) the universe is what we naturally feel with our sense organs (solid bodies, sunrise and sunset, etc.), (2) the universe which exists within itself, but is not opened to direct sensual experience (movement inside of atoms and nuclei), (3) the "universe of a scientist" (described through laws, equations, diagrams and constantly changing theories). Such physicists as A. Eddington went further, having declared that world of physical science is only a world of symbols, in which only those aspects are taken out from the world of sensual experiment which are measurable and such symbols as electron, quantum, potential (which are not observed, but assumed), are introduced for the interpretation of chosen obviously limited data. In such an approach the abstract and symbolic world of physics is only a construction of the human mind and the final reality is either bipolar (i.e. intelligence and matter are two sides of the same reality) or it is Universal Intelligence. This same direction was strengthened and developed through a unique interpretation of unity of mass and energy, indivisibility of human observer and observed matter and others.

And, at last, the final chain of transition in the direction of New Age thinking from Universal (God's) Intelligence to the mind of man was made up of a new view of K. L. Morgan on biological evolution.

This new view was soaked with the philosophy of T. de Chardin, after which followed ideology of O. Huxley and the psychology of K. Young, A. Maslow and others, on the general background of social and cultural development of the West and influential growth of Oriental culture in manipulating psychology.

T. de Chardin, sharing Morgan's ideas, looked upon biological evolution as a process *having not resultant but emergent* character, to counterbalance the materialistic point of view.

Evolution does have a certain direction--from less to more organized forms of lives and cognition. If evolution had been directed by blind chance only, then life would not have been able to develop in one direction of highly organized growth. There must be something more than "blind" chance.

Consciousness would not have been able to *appear* if it had already been presented in previous "animate" and "inanimate" forms of reality. Thus, it is reasonable to presume, according to T. de Chardin, that consciousness directs the whole process of evolution from the very beginning. Afterwards, T. de Chardin also extrapolated the process of evolution for the future. T. de Chardin presupposed that all the evolutionary processes will meet in an omega-point-superpersonal unity of everything in God. This makes God to be a *final* (the first and the last) reason of evolution, but not simply to be an active reason or alpha-point. Thus, according to T. de Chardin, Homo Sapiens resembles a caterpillar on the eve of its turning into a butterfly--into a being of a totally different nature or "consciousness" (*cosmic consciousness*).

However, we should keep in mind that New Age would not turn the priority of intelligence down basing its grounds only on philosophical, logical, psychological and ideological reasoning. Medicine discovered that brain of a human consists of two cerebral hemispheres. The left hemisphere is usually responsible for controlling rational, analytical or conceptual thinking activity; the right hemisphere is responsible for intuitive, emotional and aesthetic activity. Moreover, the right hemisphere often tries to grasp intuitively and immediately the truth before the point when the left hemisphere is ready to discover the same truth by rational methods. That is why overestimation of rationality, logic and activity of the left hemisphere in general is unwise in comparison of intuition, feelings and activity of the right hemisphere in general. Nevertheless, in the West, "left- hemispherical" intellect was quite obviously recognized as the foundation of all knowledge and social behavior.

Based on all the above mentioned information and speculations, New Age supporters made three following steps in the direction of mysticism: (1) They accepted that normal human consciousness is much more than "pure" intelligence or logic (and it is functioning not only with the help of the left hemisphere, but of both hemispheres); (2) going out the limits of this normal (awakening) consciousness in the area of different (so-called *transcendental* or *mystical*) consciousness. This changing begun even before New Age had become familiar with penetration of the oriental ideology to the West. N. Blavatskaya, N. Roerich and H. Roerich as well as yoga practice also played a certain role in it.

However, various kinds of the oriental mystics are based on the view that the material world is an illusion and also some modern New Age mystics recognize that real mystical experience gives not only experience of our unity with cosmos, but also emptiness, isolation and does not answer human questions. That is why it does not live up to all the aspirations of those followers of New Age looking for a better world instead of isolation from it.

They needed to do one more step, though; (3) this step consisted of making a decision to go out of the limits of the human being itself and get in contact with spirits, bodiless beings, who supposedly know more than we know because they dwell in a "spiritual dimension". These spirits can get in contact with us with the help of rational language, using human mediums and so-called "channels." Though it is quite difficult to correlate the supposition that real spiritual beings exist outside of my own consciousness with the already accepted supposition of the New Age that "I create my own universe," some New Age apologists (S.McClaine and others) consider such spiritual leaders to be our own "super"-self. Thus, we can create our own spiritual conductor and plan it unto "objective existence in universe" for the practical goal of leading us into a "spiritual" dimension. At first sight McClaine's idea that the "universe and myself are one" may look like absurd. M. Fergusson and other New Age apologists protect it, using the analogy of a *hologram*. Each fragment of a hologram gives the same three-dimensional picture as the whole hologram. In the same way the whole universe can be presented in each individual.

3. The Verification of the Knowledge Trueness

There are two main forms of the verification of the knowledge trueness (everyday, scientific and theological):

- 1) *the logical verification* is the establishment that in our knowledge there is no internal contradictions;
- 2) *the experimental (practical) verification* is the comparison of our knowledge with the observable reality. How? – be means of the establishment of the successfulness of the explanations and the predictions of the real state of the things, realized on the base of the given knowledge.

Atheists do often state: scientific doctrines are testable by the experience and historically, but important Christian doctrines are not testable by scientific methods.

But, for example, the important fact of the resurrection of Jesus Christ can be checked by scientific academic criteria of the human history. From the point of view of the documental historical witnesses the New Testament has the highest indications in the comparison between the dating of the described events and the dating of the most early copies, in the most large quantity of the most earlier copies, in the degree of the exactness of the coincidence of different original copies in comparison with any other antique book (before 1 century of new era), in the comparative analysis of the descriptions of life and resurrection of Jesus Christ by the Christian and the contemporary non-Christian sources. There is no convincing refutation of the life and the resurrection of Jesus Christ by someone. All the attempts of the supporters of the historical materialism, beginning from Marx, Lenin and Soviet leaders to elaborate the explanation of the Christianity origin by only social-economic reasons without considering the historical witnesses on the real existence and resurrection of Jesus Christ had ended in a fiasco. Therefore the fact of the resurrection of Jesus Christ is the fact of the reality *by all rules of the secular historical science!* By the way, before his death F.Engels was convinced by fathers-cappadocians about the resurrection of Christ and had written that the fact of the Christ resurrection is not mythological but entirely historical!

It is natural to ask, *if science gives the proofs?* And is it possible strictly (absolutely) to proof the relative truth? It is clear that no (in a more detailed way – see, for instance, [6]).

The study of the problems of the human knowledge and the process of cognition is the object of *the theory of cognition (gnoseology, epistemology)* which is one chapter of philosophy. Let consider now the notions of *view-world, philosophy and religion.*

View-world claims to give the whole picture of the world and the whole personal orientation and usually has a form of philosophy or religion. It is curious that till now there is no strict definition of philosophy: What is *philosophy*?

In the variety of approaches to the definitions of philosophy one can separate three the most important accents: 1) the rational (an in this sense scientific) study of main problems of the nature of reality, genesis, place of man in the material and spiritual world, the human cognition, the human activity, the valuable, ethical, aesthetical relation between man and the world; 2) the classification and the comparative analysis of the human view-world, including analysis of criteria of the choice from them and, in particular, criteria of the trueness; 3) "science of sciences" (the unification of various cognition methods from particular sciences into the unique consistent methodological system). And along three directions (the cognition problem, the knowledge trueness and the elaboration of the unique consistent methodological system of knowledge and cognition) philosophy is still far from not only completion, but also from the consensus in the limits of any one view-world. *Religion* is the notion, at all almost non-understandable for many men: external observers evaluate it usually by external and often secondary signs, and believers live in accordance with its spiritual and moral principles. From the external philosophical side, religion is in fact view-world, which includes in itself a number of concrete theological statements, without which it loses itself, and from internal side, it is the particular spiritual life of every believer, who is personally related with God.

4. Truth in the Christianity

1.Christ is *Truth*: "*I am the way, the truth , and the life: no man cometh unto the Father, but by me* " (John, 14:6).

2.Christ does also say to people:

"And ye shall know the truth, and the truth shall make you free" (John, 8:32).

5. On Scientific Realism

Is science in accordance with the reality? For instance, we recall that nominalism, instrumentalism and a number of similar currencies reject ontological realism.

The position, which rejects independency of objects from the cognized subjects, is traditionally named by idealism, the traditional representative of which there was Berkeley, who assumed that all objects have the mental nature and are the ideas of our conscience.

In the modern philosophy idealism of the Berkley interpretation is for a long time went out of mode and in analytical philosophy the negation of independency from cognizing subjects is obtained the form of the semantic anti-realism. Anti-realism relative to objects assumes that objects, postulated by theories, are at least useful intellectual fictions.

Such positivists as O.Kont, E.Mach and B.vanFraassen are anti-realists relative both theories and objects. According their opinion, it is necessary to belief only to those statements, the trueness of which can be established by observations. Positivists relate with suspect to the notions *causing* and *explanation*. They support the opinion that theories are the instruments for prediction of phenomena and for organization of our thoughts.

In New time D.Hume and I.Kant elaborated the study, named "agnosticism", in accordance with which man is able to cognize only his feeling perceptions, but since it is impossible to refer the world of his feeling perceptions with the external world, then we do never know what is the world indeed, i.e. the world itself is uncognizable.

Agnosticism is reflected in the Helmholtz theory of symbols, in accordance with which knowledge is not image, but the reality symbol which is not similarity with it; then in the Poincaré conventionalism, from point of which all the theories are at least the useful agreements; further in the instrumentalism, interpreting knowledge as the instrument for calculations and predictions etc.

In the Copenhagen interpretation of quantum mechanics there is no fundamental reality which describes a quantum state and prescribes the method of calculation of the experimental results. In it beforehand it is not known that the system can be in such fundamental state that in its measurements the exactly known result can appear. The physical universe exists not in the deterministic form, but as the set of probabilities or possibilities.

For example, the picture (the distribution of the probabilities) of millions of photons, which are diffracted through the slit, can be calculated with the help of quantum mechanics, but the exact path of every photon cannot be predicted by no known method.

A. Einstein did never accept quantum mechanics as “real” and complete theory, battling till his last days for the interpretation which can be consistent with relativity theory without accepting the Heisenberg indeterminacy relations. Once he said that “*God does never play dice*”, skeptically referring to the Copenhagen interpretation of quantum mechanics which assumes that there is no objective reality, different from that which is observed through the measurements and observations. The main aim of our analysis consists not in the contraposition of the view points of Bohr and Einstein but in analysis of the question if is the modern physics is able to support the positivistic Bohr anti-realism or the Einstein realism. If is something in the modern fundamental physical theories which “indicates” (or “does not indicate”) to the existence of the objective reality, which is independent from our observations, or something, which “indicates” that we can (or cannot) cognize it?

In the notion *reality* science philosophy postulates the existence of reality which is *independent from the cognizing subject*. Scientific realism mainly appeared as the reaction to nominalism, instrumentalism, conventionalism and finally formed in the battling with anti-realism, mainly under the influence of successes of scientific-technical progress. In inhomogeneous currency of scientific realism there are known three its versions – naïve, usual (or typical) and critical.

Naïve realism is the position of many people from the point of view of the common sense. [Common sense obtained by all normal people during their natural life process in the everyday human communications and in the actions with the objects of our usual experience. It is similar to the development of the native language with which is connected the common sense. In many situations the common sense is used in fact as the primary universal form of knowledge].

In accordance with it, the world is such as it is described by the modern (however, by pre-quantum) science: there essences, which are well described by the well argued scientific theory, do really exist.

Typical scientific realism is a position, represented in [7,8], and also somewhat different position of a number of authors. From this position, in particular, it is followed that scientific realism is based in the whole on the statement that scientific theories tend truly describe reality, which exists independently from the cognizing subjects. Briefly in [8] there were formulated the following statements of scientific realism:

- (a) scientific theories can be evaluated in terms of trueness or the approximation to trueness;
- (b) their main purpose is trueness or the approximation to trueness;
- (c) their success, confirmed by the science progress, witnesses their trueness;
- (d) if they are true, then non-observed essences, which are assumed in them, are really exist;
- (e) if they are true, then they will explain the observed phenomena.

The main argument of realism is the *conclusion about the best explanation of the reality*: scientific realism is the unique science philosophy which can explain the scientific progress. Anti-realists state that it is too risk to assume scientific theories as true because some previous scientific theories are found to be mistaken, for instance, theories of phlogiston and ether. Therefore also the modern theories can be recognized as mistaken ones. However the position of scientific realism now has many supporters.

Later on it was appeared a more "weak" realistic position – *critical realism*, claimed in a various ways by a number of authors (see, for instance [9]). In [9], considering the conceptual pluralism, which is inevitably appeared in the language limits because of the Quine indeterminacy thesis [10], it was claimed that on the construction of reality the human factor is partially influenced.

6. About Knowledge and Faith (Belief)

If we shall speak on the *source* of human knowledge and on the *origin* of human thinking, then the decision of these questions will be directly connected with the view-world. For atheists and positivists there questions are the insolvable problem: the point is in that, that in the base of even rational (scientific) knowledge there are un-provable (and at least, irrational) premises, which are accepted by faith.

Let now consider the definition of the word *faith (belief)*. This word is not often defined in dictionaries and encyclopedias and, moreover, its definition does strongly depend on the view-word of the author (see, for instance, [1-3]).

In the simplest cases one can reach the practical consensus if he assumes that *to believe (have a faith)* in something signifies to accept (this something) as true and real without the proof in his emotionally-will sphere. The Bible says about faith the following: "*Faith is the substance of things hoped for, the evidence of things not seen*" (Hebbr.,11:1). Generally, the notion *faith* is connected with three regions of the human spiritual life: *emotions* (as an emotion, opposite to the emotion *doubt*), *will* (as something, accepted to faith in the result of the will act) and *mind* (as a premise, dogma, axiom, accepted by human mind, intellect without the proof in any view-world and knowledge).

It is erroneous to assume that our mind does always doubt our faith. Indeed, our faith itself has a sufficient number of foundations: 1) the logical consistency of the faith statements for the sufficiently reasonable man (by the way, it is impossible to believe in the phrase "*I believe to nothing*", since it rejects logically itself), 2) accordance with the true facts, 3) the sufficient completeness of the explanation (of what that it tends to explain), 4) viability (the applicability in practical cases) etc. It is quite justified the question: Why the people believe in something? Reply: because when we believe in something, then it signifies that this something is the truth for us (+ and we recall that to say "I believe in nothing" is internally inconsistent).

How do knowledge and faith correlate? → In fact, *any knowledge* is based on the believe in the initial premises, which are accepted *a priori*, through intuition, and which it is impossible to proof directly and rationally(see, for instance, [11]) – in particular, in following ones: (a) our mind can obtain reality, (b) our feelings reflect reality, (c) the logic laws.

Directly from the definition of science (see, for instance, [11,12]), it follows that besides the premises (a)-(c) in the base of *science and scientific knowledge* there are still some other premises. In the 1-st, it is faith in that *the material world exist objectively* (and as a particular case of (a), *the human rational mind is able to understand its true nature*). In the 2-nd, it is the statement that *the nature is unique*. In particular, it signifies that there is *an order (the general laws) in the nature, and also reproducibility of natural phenomena in various spaces and in different times*. The 3-d, the mostly well-known postulate is the *causality principle*.

It is universal, applicable in all sciences and only in the spiritual life is added by the *auto-causality principle* (*the action of free will for personalities*).

All these initial postulates of faith in the base of scientific knowledge are agreed with the Christianity (see, for instance, [12]): The point is that God, created the universe, created also a man (the human mind) by His image and similarity (Genesis,1:26) and, moreover, prescribed to a man to govern the universe from His name (Genesis, 1:28). And namely we can perceive the universe and govern it and God prescribed the correlation between the rationality of nature laws and the human rationality.

7. About Science and Pseudo-Science

In the history of science it is known the interesting question: if one can clearly rationally formulate the totality of the necessary and sufficient conditions for the separation of "true science" and "incorrect (false) science (or pseudo-science)" and similarly – "true theology" and "pseudo-theology"? The attempts to clearly formulate such demarcation arguments in the history of science failed (for the detailed considering of this question it is possible to refer to [13-15]). And although it is always useful to take for examining the method of scientific research, applied by the founders of the natural sciences and firstly formulated by F.Bacon (observation, experimentation and inductive classification with known four criteria: observance, repeatability, refutability and predictability, - see also [16]), nevertheless, these four criteria not always can be fulfilled or checked in the modern real research in natural sciences (archeological, paleontologic, geophysical, astronomical, astrophysical, cosmic, cosmologic and sub-microscopic) [11, the second reference].

And instead of the abstract "philosophic" separation between true science and pseudo-science many professional scientists consider practically, that in principle it is possible to accept any scientific theory under condition that in there is no violations of logic laws and no not only evidently erroneous, mistaken statements, but there are eliminated all the doubtful statements and are supported by witnesses (evident doubtless facts). Earlier Kuhn [17] presented the term *paradigm* in science, which signifies a certain diffused field of axioms, defining what is scientific in science and giving the scientists a certain model of the establishment of problems and its solutions. Paradigm as if protects science from the penetration in it the weeds.

But from other side earlier or later it becomes obsolete and begins to be an obstacle to appearing the new ideas. When scientific ideas become that, which still yesterday it was un-scientific, then scientific revolution appears. It is curious the known expression of F.Bacon: "The truth more probably appears from the error, than from the obscurity" [18].

8. On the Mutual Complementarity of Science and Theology

In the base of the theological knowledge is the faith in the In the base of theological knowledge it is the faith in the Divine inspiration of the Bible as the Revelation of God , expressed Him through a number of authors and also premises (a) – (c) with utilization of all the human experience, including scientific knowledge. It is clear that the Christian theology contains relative trueness, since he theology, just as science, is developing, but, in difference from science, it contains the elements of absolute trueness, because it supports on the Reveal of God – the Bible.

Now we compare science and Christian theology. Christian theology is the particular way of cognition, based on the world description through the human interpretation of the Bible and human experience. Science can ensure us by information on nature and sociological characteristics of human society through scientific method, and theology opens to us the nature of human inter-relations and our inter-relation with God through the biblical hermeneutics. Both science and theology are based on the faith in the initial postulates or dogmas, accepted by human irrational way (for instance, by intuition in science and through the revelation of God , conceived by the mystic inspiration in the Christian world-view and theology).

Both science and theology give us the partial description of the reality. Neither science, nor theology gives us total or absolute description of reality. Both science and theology contain "open questions", because they are developing. Moreover, since science is connected with the human interpretation of nature and theology is connected with the human interpretation of the Bible, both of them can be subjected to the errors and mistakes, which can bring conflicts between them. But between the Nature as the general revelation of God and the Bible as the particular revelation of God there cannot be conflicts, since God is the Author of both of them and He cannot contradict Himself.

[The complementarity principle was introduced in science (quantum mechanics) by N.Bohr, because some notions of classic physics in application to the quantum-mechanical objects were found to be mutually exclusive]. In fact, the complementarity approaches to the integration of both descriptions with the aim of obtaining the adequate consistent picture of reality. The complementarity do not impose such condition that there is no influence of science on theology and vice versa. On the contrary, it is natural to recognize that there is influence of scientific understanding of the way of factual creation of the universe by God. And it is also natural to recognize that the choice of problems in natural sciences and, moreover, the choice of the models in psychology can take place under influence of theological considering.

But also it is natural to recognize that science is not able to justify ethics and all the more ensure us by knowledge on the enter-relation between God and man or, from other side, that theology, generally speaking, does not ensure us by information about mechanisms of the processes, which take place in the physical universe. The complementarity is not *thoughtless acceptance of contradiction, paradox or dualism*. On the contrary, it consists in recognizing that two (or more) different but acting considerings in the joint application *is able describe and comprehend something out of the possibilities of any of science and theology separately*.

Why is it appropriateness to use such complementary description? Mainly we have not sufficient means for adequate study of *un-known by the only one single description*. Then our descriptions can be complementary, because *the different knowns* can be for one *un-known*. And finally the *different* descriptions appear for the study of *different* sides of the studied object and therefore their contributions in our comprehension of reality have to be *complementary* to each other.

Also the appropriateness of developing the complementary descriptions can be easily seen in science which is branching in the multitude of separate scientific disciplines, every of which has its particular field of application. *Demand that in every field it can be used only one scientific discipline brings to the so called reductionism, the limitations and shortcomings of which are well known*. But if we decided to be in the limits of science, it is well known that the description of somewhat phenomenon in the life of alive being can be given in terms of physics of this phenomenon, chemistry of it, biology of it, psychology of it and sociology of it.

And we do not expect any contradictions between the various descriptions, but consider them most likely to be complementary.

We do not expect the total coincidence between scientific and theological descriptions. If such coincidence were take place, then we would not need neither the first, nor the second.

However, we need both kinds of description, since there are complementary and do not exclude one another.

We have said about science and pseudoscience above. Similarly one can accept practically any theological theory under condition that there is no contradiction in it with the Divine Scripture – the Bible and also there is no contradiction with general revelation which is reflected in the true human experience → there is no violation of the logic laws etc.

Since both scientists and theologians can mistake, for the Christians there are natural such conclusions:

- 1) comprehension that it is necessary to be prudent in his conclusions,
- 2) comprehension that the human knowledge *depends* from God desire to open us a certain trueness (through the direct revelation or through other people),
- 3) utilization in our practice the following rule:
“Trust in the Lord with all thine heart; and lean not unto thine your understanding. In all thy ways acknowledge him, and he shall direct thy paths” [Prov.,3:5-6],
- 4) comprehension that Jesus Christ in our communication with Him cleans our will from egoism and our mind from errors, mistakes and illusions, caused by the Sin-fall.

It is useful in scientific apologetics to know about three different classes of paradigms in different classes of sciences [19]. If the objects of natural sciences (physics, astronomy, chemistry, biology, geology etc) are limited by *natural* phenomena and processes, then the objects of some other sciences include in themselves also the *artificial* facts as the creation of the *human intelligent design* (they are archeology, medicine, criminal research of crimes, mathematics, cybernetics, informatics, the also human history, economics and political sciences).

There are also particular sciences, which study the origin and history of the Universe, of biologic life – in them there are manifested the view-world establishments of researches. It exists the dilemma of the following choice: or (1) *the self-organization of mater from nothing (vacuum) or from the less organized level into more organized level or in the consequence of the irrational case, or of till now un-known synergetic processes or phase transitions*, or (2) the origin of the Universe and life (both biologic and spiritual) in the result of *the Highest Intelligent Design of the Personal Creator – God*. And in these classes of sciences there are *co-exist three different classes of paradigms of scientific researches* : the class of paradigm in the field of the study of natural processes; the class of paradigms in the field of the penetration of the human intelligent design in the currency of natural processes; class paradigms in the researches of mechanisms of the Universe and life origin. Besides, *all methods of scientific research* are the fruit of the human intelligent design of a man, created by Divine image and similarity.

8. On the Inconsistency of “Scientific Atheism”

There are 2 dogmas in the foundation of “*scientific atheism*” :

(a) *Atheism (the belief in the absence of the existence of God)*. All data of modern science which studies the empirical immanent world, univalent testimony that science did not prove and principally can never prove the absence of God and transcendental world or all the reality can be explained by biologic, physical, chemical and other natural processes. On that the known Italian physicist A. Zichichi [20] and many Christian theologians [21] convincingly speak.

(b) *Materialism (the belief in that the more simple form of matter can product from themselves through the auto-complication and auto-perfection more complicated forms)*.

When we speak on the first dogma, we can mark that nobody in the objective way can confirm its trueness and the unique strictly scientific answer on it is the following one: science does not know the reply on it. As to the second dogma, we have the known expression of great Russian writer and publicist L.N.Tolstoi: “Materialism is the most mystical from all doctrines. It takes as the ground of everything the belief in the mythological matter which everything creates and everything originate from itself”.

And young Russian philosopher A.F.Losev said: "Atheism easily resolves "the world enigmas" and forgets on the limitedness of the human mind, sometimes assuming the existence of the blind chance and forgetting the purposefulness in nature or explaining some mysteries by other ones"[19]. And factually it acts as the mythological baron Munchhausen who pulls out himself by hair from the water.

Besides these 2 dogmas of atheism, there is one more defect of the materialistic atheism. The materialistic atheist believes that the nature is everything that is existing, and there is no transcendent God. But if the materialistic atheism could be true, it will not be possible to prove something logically, because materialistic atheist cannot have simply the laws of logics. He believes that everything is material. But the laws of logics, the first founder of which is Aristoteles, do not belong, strictly speaking, to the physical world and so he is inconsistent.

Moreover, a long time ago representatives of the rational thinking in philosophy and then in science and theology noted the presence of paradoxes and antinomies in the human thinking as the inevitable reality. Paradox is 2 contradictory (conflicting) statements, in favor of every there are convincing arguments. The most acute form of paradox is antinomy, that is the reasoning which proves the equivalence of 2 statements, one of which is the negation of other. Many unbelievers state that all antinomies are simply the contradictions. Clearly formulated paradoxes and antinomies are the important bases in elaborating of logical theory. Paradoxes for logics (as theories) remind experiments for natural sciences. Paradoxes and antinomies do often meet in the Bible and theology [5].

"The re" of logical paradoxes is paradox of a liar : *that, what I am now speaking, is lie. The true or the lie am I speaking?*

- 1) If this statement is true and the speaking person states that it is lie, then I is lie (i.e. if I have said the truth, then I have said the lie).
- 2) If this statement is false, then the speaking person said the truth and than it is not lie (i.e. I have said lie, then I have said the truth).
- 4) And from 1 and 2 it follows that the truth is identical to the lie (i.e. if the speaking person is lying then he is saying he truth and vice versa).

About this paradox it is said in the Paul Letter to Titus (1:12). To this paradox is dedicated the vast scientific literature and till later it was considered that it has not solution at all. And only not for a long it began to be considered an example of such difficulties, to which the mixture of two languages brings: the language on which one say about the external reality (the object language) and the language on which one say about the same language (meta-language). IN the everyday language there is no difference between these languages (for instance, there is no difference between the word combinations "the glass is transparent" (about namely the glass) and "it is true that glass is transparent" (about the expression relative to the glass). And if someone will wish to say about the world in one language and about the properties of the language in another language , then he can use two different languages (for instance, Russian and English). The difference between language and meta-language permits to solve the paradox of a liar (at least, formally).

Antinomies in the Bible and theology :

Absolute sovranità of God and the human responsibility,

The love of God and His justice,

The personal tri-unity of God (the unity in three persons),

Jesus Christ as God and Man,

Two natures in every Christian: "the old man" and 'a new man",

Transcendancy and immanency of God

The human corpus: mortality and resurrection,

The BibleБиблия is the human book and the God-inspired book.

True paradoxes and antinomies (which reflect the reality) testimony on the polyhedral character of truth – and they stand not against the mind but in a certain sense are *more higher than mind*. Mind needs not the annihilation but a renovation? And only such mind can perceive the Divine Will (Romani,12:2). Finally we can add that not only fathers of the modern science in 18-19 cc., but practically all physicists and representatives of natural sciences in the Europe and the United States of America were Christians (besides biologists, infected by the Darwin macro-evolutionism and his followers, and researchers of ex-USSR, which were under the press of ideology of Communist party. [By the way, the Darwin macro-evolutionism and atheistic ideology of ex-USSR appeared closely connected].

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