

## Theoretical model of God: proof of existence

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**Abstract.** The work is devoted to the most challenging problem of the 21<sup>st</sup> century *i.e.*, the scientific perspective of understanding the Super Power or the existence of God. The theoretical proof of the existence and of the uniqueness of God, based on the correct method of knowledge - unity of formal logic and of rational dialectics, is proposed. This proof represents a theoretical approach in understanding the Super Power: a system of axioms from which the principle of existence and of uniqueness of God is deduced. The principle runs as follows: God exists as the Absolute, the Creator, the Governor of the essence (information) and of the phenomenon (material manifestation of information). The theoretical model of man and the formulation of the principle of development of Mankind, as consequences of model of God, are proposed as well. The main conclusion is as follows: the principle of the existence and of the uniqueness of God represents absolute scientific truth and, consequently, should be a starting-point and a basis of the scientific perspectives of the 21<sup>st</sup> in search of the ultimate secret of the nature- God.

**Keywords:** Philosophy of religion, metaphysics, God, Super power, Creator.

### Introduction

1. Lately, the global problem - the problem of stable and safe development -arises before Mankind. The analysis of this problem shows that it is inseparably connected with the principle of development and with the global problem of sense and of purpose of existence of Mankind. These problems cannot be solved within the framework of 20<sup>th</sup> century science - an inductive science. As is known, the 20<sup>th</sup> century's science paradigm - *i.e.* the initial conceptual scheme of science, the approach to formulation and solution of problems - is formulated as follows: (a) God does not exist; (b) the unity of the world consists in its materiality; (c) the knowledge of the phenomenon (*i.e.* form, external aspect) determines the knowledge of essence (*i.e.* content, internal aspect); (d) any object can be mentally divided into elements; the knowledge of the elements of a system results in knowledge of the system of elements. This paradigm stipulates an inductive way of knowledge of the world, formed by ascending movement of knowledge: by the transition of knowledge from one state into higher states, *i.e.* by transition from a formulation of separate concepts to the formulation of a system of concepts. An ascending movement of knowledge in the way of an "unlimited" sequence of "dialectic negations" reflects the development of Mankind as ascension from a simple state to a complex state. The inductive science ascertains the fact of development, researches previous and present states but does not predict the future (next) states

because it does not contain a deductive key to an explanation for the principle of development. In other words, inductive science (unlike a deductive science) does not answer the main question: "Why there is development in the world?" Therefore, the 20<sup>th</sup> century's science paradigm does not allow to draw a complete (true) scientific picture of the world and, consequently, to solve correctly the following global problems: the problem of predestination, predetermination (inevitability) of knowledge of the world; the problem of the purpose of knowledge of the world; the problem of the limit of knowledge of the world; the problem of truth of knowledge of the world; the problem of existence of the absolute truth; the problem of the sense and of purpose of the existence of Mankind; the problem of source and of motive force in the development of Mankind; the problem of the way and of the limit of development of Mankind; the problem of destination of Mankind; the problem of the essence of the world. Thus, the correct research for the problem of development of Mankind is impossible without formulation of a new paradigm.

2. The formulation of a new paradigm means, first of all, a dialectic negation of 20<sup>th</sup> century philosophy (gnosiology). As is known, the 20<sup>th</sup> century philosophy is characterized by perfect scientific methods but it cannot answer the "eternal" questions: "What is man?", "What is life?", "What is death?", "What is the sense and the purpose of a human life?", "Does God (the Creator, the Governor) exist?", "What is God (the Creator, the Governor)?" Weakness of 20<sup>th</sup> century philosophy (gnosiology) is explained not by a lack of necessary scientific data but by the narrowness of modern scientists' consciousness: (a) narrow consciousness (which is not contain concept of God) determines interpretation of scientific data, and interpretation of scientific data characterizes narrow consciousness (which is not contain concept of God); (b) the modern scientists' thinking has not moved far from well-known interpretation of the key concepts: the categories "reality", "matter", "consciousness", "thinking", "thought", "knowledge", "morals", "truth", and "criterion of truth". Thus, dialectic negation of 20<sup>th</sup> century philosophy (gnosiology) and formulation of a new paradigm are impossible without a broadening of scientists' consciousness, without the critical analysis and correct definition of philosophy's (gnosiology's) key concepts: the categories "reality", "matter", "consciousness", "thinking", "thought", "knowledge", "morals", "truth", and "criterion of truth".

3. Broadening of scientists' consciousness and the correct definition of scientific concepts (in particular, the categories "reality", "matter", "consciousness", "thinking", "thought", "knowledge", "morals", "truth", and "criterion of

truth") are possible only in that case if two different, mutually connected, mutually complementary methods of scientific knowledge of the world are used: the formal-logical method (the method of formal logic) and the rational-dialectical method (the method of rational dialectics). The unity of these methods is not only the correct way of building and of substantiating a system of philosophical knowledge, but also a correct methodological basis for the critical analysis of any system of concepts. Since these methods of scientific knowledge represent the formal-logical and rational-dialectical ways of thinking, scientific knowledge (i.e. system of scientific concepts) is a consequence of these correct ways of thinking. In other words, the way of thinking determines human knowledge, and the human knowledge characterizes a way of thinking. There is no knowledge in general - knowledge separated and independent of the subject of knowledge, - and there is only human and non-human knowledge. Hence, the existence and definition of concepts (in particular, the categories "reality", "matter", "consciousness", "thinking", "thought", "knowledge", "morals", "truth", and "criterion of truth") is the consequence of a way of thinking.

4. Modern scientific thinking is analytical thinking. The purpose of scientific thinking and of scientific knowledge of the world is to comprehend scientific truth. Scientific truth represents the content of objective scientific knowledge, i.e. represents a property of a system of scientific concepts, not depending on the scientists' outlook, not containing references to the means and methods of knowledge (in particular, to devices, procedure of measurement or calculation). The objective scientific knowledge at a certain moment of history is one of states of knowledge in the process of inductive knowledge. If the process of inductive knowledge has no upper limit (i.e. an upper boundary), then knowledge - the system of scientific concepts - is always incomplete. Since the properties of a complete system, generally speaking, qualitatively differ from properties of an incomplete system (i.e. since properties of complete system are not consequence of properties of incomplete system), the content of incomplete knowledge represents relative truth. Social practice is an aspect of the criterion of relative truth. In this connection, the problem of the validity of scientific knowledge - one of the central problems in gnosiology - cannot be solved without determination of an upper limit of process of inductive knowledge, without comprehension of absolute truth. In other words, a complete (correct) definition of scientific concepts (in particular, the categories "reality", "matter", "consciousness", "thinking", "thought", "knowledge", "morals", "truth", and "criterion of truth") is impossible if absolute truth does not exist: the absolute truth is the criterion of correctness, of validity of scientific knowledge. Thus, the problem of the existence of a upper limit of inductive knowledge - i.e. the problem of the existence of absolute truth - arises.

5. The statement and solution of the problems of the existence of a upper limit of inductive knowledge and of the existence of absolute truth are out of framework of an inductive science because, according to the definition of the concept "induction", an inductive way of knowledge has no the upper limit. Each stage of an inductive way of knowledge is: statement and solution of a new problem; a new scientific knowledge; a result of scientific creativity. As George Polya - the well-known mathematician and pedagogue - has pointed out, the methods of scientific creativity are as follows: a scientist should guess the theorem before he will prove it; a scientist should guess the idea of the proof before he will carry out the proof in details. In this sense, the theorem of the existence of a upper limit of inductive knowledge (the theorem of existence of absolute truth) is my guess, my scientific hypothesis. One can guess this theorem and idea of the proof of this theorem only if one takes into consideration the concept "God" explained in the main religious sources - the Bible and the Koran. Hence, the problem of development of Mankind represents a logical consequence of the global problem of the existence of an upper limit of inductive knowledge and of the problem of the existence of God. Thus, the scientific solution of the problem of the existence of God (i.e. the correct solution of the problem of the relation between science and religion) is a key to the correct solution of the actual problem of development of Mankind.

6. As is known, one of the main purposes of science and of religion is to explain the world. However, scientific and religious pictures of the world - as results of such explanation - essentially differ from each other. This distinction is not sufficient reason, a logical substantiation, a proof of existence of the contradiction between science and religion. Really, from the formal-logical point of view, science and religion cannot be compared because there are no logical relations (i.e. relations of identity, subordination, collateral subordination, partial coincidence, and discrepancy) between scientific and religious concepts. This is explained by the fact that structures, principles of knowledge, categories (concepts), and methods of science and of religion are different. For example, science uses an inductive (analytical) method of knowledge. This method is based on the analysis, i.e. mental division of the object of knowledge into aspects. Religion uses a deductive (non-analytical, meditative) method of knowledge which is not based on the analysis. This distinction leads to the fact that the main religious concepts - "God", "creation", "result of creation" - and scientific concepts have no general (common) basis and, hence, there is no reason for comparison between them. It means that the problem of the relation between science and religion is a problem of logical-philosophical relations between scientific and religious concepts. It is obvious that this problem cannot be solved within the framework of special sciences (for example, cosmology,

astrophysics, physics, biology, and genetics) because it is a general scientific problem. For comparison of these concepts to make, it is necessary to build scientific model of God. Thus, the problem of relation between science and religion is reduced to the problem of building of theoretical model of God. Only on the base of this model, one can establish unambiguous (one-to-one) correspondence between the main, key scientific and religious concepts.

The above results in the following statement of the problem of stable and of safe development of Mankind:

(a) the solution of the problem of stable and of safe development of Mankind is impossible without a knowledge of the principle of development;

(b) the principle of development should be researched within the framework of the new paradigm (Kalanov, 2003a,b, 2005, 2006a,b,c, 2007a,b,c) which runs as follows: the world is a unity of essence and phenomenon; the knowledge of essence (i.e. content, internal aspect) of the world determines knowledge of the phenomenon (i.e. forms, external aspect, manifestation of essence); not any object of knowledge can be mentally divided into aspects (elements); the knowledge of elements of a system does not result in knowledge of a system of elements since the properties of a system are not a consequence of the properties of its elements;

(c) the principle of development cannot be correctly formulated without research and solution of the problem of existence of God because the principle of development is a logical consequence of the principle of existence and of uniqueness of God;

(d) the principle of existence and of uniqueness of God - a starting-point and a basis of 21<sup>st</sup> century's correct (deductive) science - should be the logical consequence of a correct scientific knowledge of interaction between a subject of knowledge and an object of knowledge; this principle should not depend on outlook of any scientist;

(e) it is necessary: to build the theoretical model (identifier) of God on the basis of a correct scientific knowledge of the interaction between a subject of knowledge and an object of knowledge (i.e. to build the system of axioms (premises)); to deduce logically the principle of existence and of uniqueness of God;

(f) it is necessary to identify God, i.e. to establish an unambiguous (one-to-one) correspondence between the main scientific and religious concepts;

(g) it is necessary to interpret the moral principles, stated in the Bible and the Koran, as criteria of the truth of human life, of human science and of practice, as the criteria of correct development of Mankind.

In accordance with this statement of the problem, the purpose of the present work is: to propose a scientific approach to a solution of the problem of correct development of Mankind; to propose a starting-point and a basis for a correct science in 21<sup>st</sup> century - the theoretical model of God and the principle of existence and of uniqueness of God (expressing the content of the

theoretical model of God); to propose the theoretical model of man and the principle of the development of Mankind (as the consequences of the model of God). The constructed model of God represents the theoretical proof of existence and of uniqueness of God within the framework of correct methodological basis - the unity of formal logic and of rational dialectics. Therefore, this proof is absolute scientific truth.

#### **The correct methodological basis of scientific research**

The correct methodology of scientific (analytical) research is based on following propositions (Methodology is a doctrine of the structure, of the logical organization, of methods and of means of activity. Science methodology is a doctrine of principles of building, of forms and of ways of scientific knowledge).

1. Two different, interconnected, mutually complementary methods of cognition are used in the process of scientific (analytical) knowledge of the world: the formal-logical method (the formal logic method) and the rational-dialectical method (the rational dialectics method). Formal-logical and rational-dialectic methods of cognition represent the formal-logical and rational-dialectic ways of analytical thinking, useable for achieving the purpose - knowledge of the world (A method - a way of research - is a way of achieving any purpose, a way of solving a concrete task; a set of modes or operations of the cognition of the object. In philosophy, the method is a way of construction and of substantiation of a system of philosophical knowledge).

2. The formal-logical method of cognition is based on the application of formal logic - the science of the laws of correct thinking. A subject (i.e. object of study) of formal logic as science are laws of correct thinking, i.e. the properties of a thought and those conditions which the thinking should observe to be correct. The content of formal logic as science is expressed by the following four laws which express the most simple and general properties and relations characterizing natural phenomena: (a) the law of identity; (b) the law of contradiction; (c) the law of the third excluded; (d) the law of sufficient reason.

3. The rational-dialectic method of knowledge of the world is based on application of rational dialectics - the rational theory and method of knowledge of the developing world. A subject of rational dialectics as science is the universal laws, which express the universal connections existing in the world. The content of rational dialectics is expressed by dialectics basic laws (i.e. the law of interconnection (unity) of opposites; the law of interconnection of quantitative and qualitative changes; the law of interconnection of negations (i.e. the law of negation of negation); the theory of systems; the theory of organization; the theory of control) as well as non-basic laws - dialectics' most important categories (contradiction, measure, quality and quantity, individual and general, cause and effect, necessity and fortuity, possibility and reality, content and form, essence and phenomenon,

controlling and controllable). Application of rational dialectics (namely, the law of interconnection (unity) of opposites and categories "essence" and "phenomenon") leads to the following fundamental statements: (a) the world represents a unity of opposite aspects: essence (i.e. internal, non-material aspect, the information aspect having a measure) and phenomenon (i.e. external, non-information aspect, the material aspect having a measure); (b) zero of state (i.e. zero of quantitative determinacy) of the world (i.e. "the beginning of the world") represents a unity of opposites: a unity of zero of information state (i.e. information zero) and zero of matter state (i.e. matter zero); zero of quantitative determinacy does not mean lack (non-existence) of qualitative determinacy; zero of quantitative determinacy (i.e. zero of state) exists eternally: it cannot be created or exterminated; (c) the concepts "information" and "matter" are the initial concepts designating the aspects of the world; (d) the problem of dialectical relationship between essence (i.e. internal aspect as program of existence and of development) and phenomenon (i.e. external aspect as material manifestation of the program of existence and of development) and the problem of existence and of uniqueness of the creator of the program are 21<sup>st</sup> century's philosophy main problems.

It follows from these propositions that: (a) the correct methodological basis of scientific (analytical) research represents the unity of formal logic and of rational dialectics; (b) the application of correct methodology to the research of the world leads to a statement of the problem of existence and of uniqueness of the creator of the world.

Definition of the concepts "knowledge", "cognition", and "system of cognition"

Definition of the concepts "knowledge", "cognition" and "system of cognition" is based on the definition of concepts "subject of thinking" and "object of thinking".

1. The concepts "subject" and "object" are defined as follows: "object" and "subject" are the philosophical categories (concepts) designating two interconnected, interacted aspects (elements) of a system, which are characterized by the essential signs (attributes): "passivity" and "activity". The subject (i.e. set of individuals) is a carrier of the attribute "activity", an active aspect (i.e. an active element of system), a source of the activity directed to a passive aspect (i.e. to a passive element of the system). The object is a carrier of the attribute "passivity", a passive aspect (i.e. a passive element of the system) to which activity of active aspect (i.e. of an active element of system) is directed.

2. The concepts "subject of thinking" and "object of thinking" are defined as follows. The subject of thinking is a subject as a carrier, a source of cogitative activity directed to the object. The object of thinking is an object to which the cogitative activity of the subject is directed. Since the concepts "subject of thinking" and "object of thinking" make sense only in mutual connection, they

form a system of concepts. The concepts "subject of thinking" and "object of thinking" are a basis for the following definitions.

(a) Cognition is an informational interaction between subject and object, which result in knowledge of object. The object for the cognizant subject is expressed (is reflected, exists) in the form of knowledge. Therefore, the content of science represents expression (reflection, existence) of the given object in the form of knowledge: laws, categories, and other scientific propositions, formed in the process of development of human society. From the logical point of view, the knowledge is a system of concepts and of judgments. From the point of view of the information theory, the knowledge is a system consisting of information elements. From the gnosiological point of view, the knowledge of object is the essence of the object of cognition, and the object of cognition is a manifestation of essence.

(b) The process of scientific knowledge of the world is carried out within the framework of the "human systems of cognition" consisting of "subject of cognition", the set "objects of cognition", "means of cognition", and "knowledge". The category "human system of cognition" is the complete system of concepts, determining knowledge, and the knowledge characterizes this system. (Human knowledge is objective if it depends on neither "means of cognition" nor outlook of "subject of cognition". Therefore, in the case when it is a question of objective knowledge, one can omit the concepts "means of cognition" and "outlook" for brevity).

Logical model of the Absolute: The principle of existence and of uniqueness of the Absolute

A logical model of the Absolute is a consequence of formal logic. The principle of existence and of uniqueness of the Absolute is the content of the logical model of the Absolute. Therefore, this principle is an absolute scientific truth. The logical model of the Absolute represents a system of the following basic axioms (premises).

1. The theorem of the existence of the object is formulated as follows: the object "W" exists if there is information about this object.

2 The theorem of logical completeness is formulated as follows: (a) if the object "W" exists, then the object "non-W" exists as well; (b) if the object "non-W" exists, then the object "W" exists as well; (c) the set of objects "W" and "non-W" is complete. In other words, existence of the object "W" (or "non-W") entails existence of the object "non-W" (or "W"). The object (concept) "non-W" is called logical complement of the object (concept) "W".

3. In accordance with the theorem of existence of the object, the concrete concept "object of cognition" is divided into two contradicting concepts: concept "object of cognition, divisible into aspects" and concept "object of cognition, indivisible into aspects". The objects making up the volume  $V$  of the divisible concept "object of cognition" are divided into two logical classes: the class "objects of cognition, divisible into aspects" and the class

"objects of cognition, indivisible into aspects". In other words:

$$V_{(\text{object of cognition})} = V_{(\text{object of cognition, divisible into aspects})} + V_{(\text{object of cognition, indivisible into aspects})}$$

i.e. (objects of cognition) = (objects of cognition, divisible into aspects) + (objects of cognition, indivisible into aspects) (Logical class is a set of objects having common attributes (essential signs). Owing to the existence of common essential signs, objects are embraced by a general concept). The basis for such division is the presence of the attribute (essential sign) "divisibility into aspects" in one class and lack of this attribute (essential sign) in the other class. According to it, the class "objects of cognition, indivisible into aspects" is a non-empty set (i.e. number of elements of this set is not zero) if the class "objects of cognition, divisible into aspects" is not an empty set.

4. The volume of the concept "object of cognition, divisible into aspects" is all objects which are embraced by this concept. Hence, this is a general concept. The volume of this concept is expressed in the form of a logical class - set of objects which are embraced by this general concept. The class "objects of cognition, divisible into aspects" is the higher class (i.e. it is a genus) relative to other classes of objects and of phenomena since it includes all other classes of objects and of phenomena. There is no class which can be a genus for it. Therefore, the class "objects of cognition, divisible into aspects" is a higher class in an absolute sense, and the concept "object of cognition, divisible into aspects" is a category. The content of this category is the unique attribute (essential sign) of objects and of phenomena: divisibility into aspects.

5. The concept "object of cognition, indivisible into aspects" is a negative concept. The definition of this concept is a negative definition: "object of cognition, indivisible into aspects" is the object indivisible into aspects, not having aspects. This definition (i.e. opening of the content of concept) is the statement of a lack of attribute (essential sign) of the object: divisibility into aspects, existence of aspects. In other words, this definition is the negation of the existence of aspects.

6. The volume of the concept "object of cognition indivisible into aspects" is expressed in the form of a logic class - set of objects which are embraced by this concept. One can prove that the number of objects (elements) in the non-empty set "objects of cognition, indivisible into aspects" cannot be more one. In order to prove it, one should assume that the contrary is valid: the number of objects (elements) is two. In accordance with the definition of the logical class, the made assumption means that these objects have a common attribute (i.e. the common aspect) and, consequently, can be embraced by a general concept. But these objects cannot

be embraced by a general concept because they have no aspects and, consequently, cannot be compared with each other. If two objects are incomparable with each other, then one of them does not belong to the given set. Hence, (a) the made assumption contradicts definition of the concept "object of cognition, indivisible into aspects" and, consequently, is incorrect; (b) the set "objects of cognition, indivisible into aspects" contains only one object; (c) the concept "object of cognition, indivisible into aspects" is not a general concept, but an individual concept.

This system of axioms (propositions) results in absolute truth - the principle of existence and of uniqueness of the Absolute (the object "non-W"). This principle is formulated as follows: (a) the individual concept "object of cognition, indivisible into aspects" ("non-W") exists; this concept represents a category; (b) the category "object of cognition, indivisible into aspects" ("non-W") is designated by the individual logical name "Absolute"; the individual is a bearer of this name; (c) the Absolute does not belong to the set "object of cognition, divisible into aspects" ("W") and exists eternally (i.e. the Absolute cannot be created or exterminated) because zero state of the world ("W") cannot be created or exterminated.

#### Concrete definition of rational dialectics' main principles. The dialectic model of the Creator, of the Governor of essence and of phenomenon

A universal connection and relationship between objects "Absolute" ("non-W") and "world" ("W") can be defined only by a concrete definition of rational dialectics' main principles. The concrete definition of rational dialectics' main principles represents system of the following basic axioms (premises).

1. "Reality" is the philosophical (gnosiological) category designating the human system of cognition (human system of reference). Categories "reality" and "human system of cognition" are identical concepts.

2. The relationship between volumes of the concepts "reality", "reality divisible into aspects", and "reality indivisible into aspects" is expressed by the following logical form:

$$V_{(\text{reality})} = V_{(\text{reality divisible into aspects})} + V_{(\text{reality indivisible into aspects})}$$

3. The class "reality divisible into aspects" is called the world (object "W"), and the class "reality indivisible into aspects" is called the Absolute (object "non-W"). "Reality divisible into aspects" and "reality indivisible into aspects" are the aspects of reality making up the volume of concept "reality". Hence, "Absolute" and "world" are the eternal aspects of reality (i.e. these aspects cannot be created or exterminated), forming a complete system "Absolute + world".

4. The world as the "reality divisible into aspects" is the unity of internal and external aspects. The internal aspect is called essence, information. The external aspect is called phenomenon, matter, material

manifestation of essence. The essence determines the phenomenon, and the phenomenon characterizes the essence.

5. There is a set of states of information and, consequently, a set of states of matter. Each state of information (information state) determines state of matter (matter state); matter state characterizes information state. Information states are not mutually excluded and are manifested as a variety of objects of the world. Manifestation of a zero state of information is a zero state of matter (so-called "physical vacuum"), i.e. an absolute zero state in which matter has no properties (for example, energy, extent).

6. The system "Absolute + world" represents set of the objects (elements) which are in relations and connections with each other, forming the certain integrity, unity.

7. A research of systems is carried out within the framework of the system approach, cybernetics, and the theory of control, which are a concrete definition of rational dialectics' main principles. The concepts "system approach", "cybernetics", and "control" are defined as follows.

(a) The system approach is the direction of methodology of scientific knowledge and of social practice, which is based on consideration of objects as systems. The system approach orientates research toward the disclosing of integrity of object, toward the marking of diverse types of connections in object and the reducing of them to a uniform theoretical picture.

(b) Cybernetics is a science about the general laws of reception, storage, transfer and processing of the information. The principal object of research is the so-called cybernetic systems considered abstractly, without dependence on their material nature. Examples of cybernetic systems are a computer, the human brain, biological populations, and a human society. Each such system represents a set of interconnected objects (elements of system) capable to perceive, to memorize and to process the information, and also to share, to interchange information. Modern cybernetics consists of a number of sections representing independent scientific directions. The theoretical kernel of cybernetics is the theory of information, the theory of algorithms, the theory of automatic devices, the theory of optimum control, the theory of recognition of images, the research of operations Cybernetics develops the general principles of the creation of control systems and systems for automation of brainwork.

(c) Control is the influence on a system for the purpose of preserving its structure (qualitative specificity), of maintaining conditions of functioning, of realizing its programs and aims, of perfecting and of developing.

8. Key concepts in the theory of systems, the system approach (the system analysis), cybernetics, the theory of organization, and the theory of control are as follows: "system", "structure", "connection", "hierarchy",

"subordination", "creation of system", "synthesis of system", "designing of system", "constructor of system", "operator (governor)", "influence", "controlling influence", "control", "automatic control", "optimum control", "control system", "regulation", "system of regulation", "object", "object of control", "task of control", "purpose of control", "optimization", "program", "movement", "space of states", "motion in space of states", "process", "technological process", "functioning", "functioning of system", "conditions of functioning", "information", "time", "resources (energy, information, computing resources)", "mathematical model", "identification of object (of process)", "reliability", "informational restrictions", "parameters", "criterion", "criterion of optimization of control", "observability", "identifiability", "controllability", "stability", "stability of process", "criterion of stability".

9. The concepts "observability", "identifiability", and "controllability" are the basis for the statement and solution of problems of the synthesis of systems in the theory of automatic control.

10. The concepts "observation" and "measurement" are identical concepts. Measurement, observation is a necessary component of control. Measurement is the initial stage of obtaining the necessary information about the controlled object, process. The concepts "control" and "information" are interconnected. Interconnection between control and information obtained by means of measurement and of observation is organic.

11. The concept of controllability is connected with the movement (transition) of a system from one state into another by means of control. This concept has either a structural-qualitative or quantitative sense. In consideration of the structural-qualitative aspect of controllability, the possibility of transition of controlled system from one set of states into another set is of interest. In the large system with hierarchical structure, controllability of each level (echelon, strata), beginning from the lowest level and finishing with the highest level, can be researched. (Hierarchy is a disposition of the parts or elements of the whole in the order of decreasing from the highest to the lowest. The term is used: in the general theory of systems for the description of any system objects; in the theory of organization for expression of the principle of control; in sociology for a designation of the social structure of society). In any case, controllability depends on the structure of the system, structure of organs of control, values of the parameters, available energy of control.

12. In a broad sense, identification of an object or of process is obtaining or specifying (on the base of experimental data) a model of the given object or process expressed in either terms. In other words, identification (of objects) is the establishment of the correspondence between recognizable object and the image (model), i.e. the identifier. Identification in a broad sense is an integral part of any true science and has an ancient origin. Identification is carried out (i.e. is expressed) in terms of

the chosen class of model. Efficiency of identification in many respects depends on the successfully chosen language of the description and structure of the model, which are entirely based on theoretical aprioristic premises.

13. The concept of stability of movement is one of the basic concepts of the theory of systems and the theory of control because stability is an internal, integral property of system or of movement. This property is described in terms of the space of states. The following proposition is essential. If system contains a subsystem in the state of unstable equilibrium, and this subsystem is not controlled by the remainder part of the system, then entire system is in the state of unstable equilibrium.

The following statements are deduced from these basic axioms (premises).

(a) If the object is a synthesized (a constructed, formed, created) object, then it is mentally divided into aspects. If the object is mentally divided into aspects, then it is a synthesized (a constructed, formed, created) object. Consequently, the concepts "object synthesized (constructed, formed, created)" and "object divisible into aspects" are identical ones.

(b) If the object is a synthesized (a constructed, formed, created) object, there is a creator (constructor) of the object. From this point of view, if the system "reality = Absolute + world" is a complete system, and the object "world" is mentally divided into aspects, then the object "world" is created by the object "Absolute". The object "Absolute" is not mentally divided into aspects. Hence, the object "Absolute" is not a synthesized (a constructed, formed, created) object. The object "Absolute" bears the philosophical name "Creator". The logical category "Absolute" is designated by the individual philosophical name "Creator".

(c) Creation of a set of objects of the world represents the following action. The creator creates and injects the essence (the information, the program) into the information aspect of the world. This essence is manifested in the phenomenon aspect of the world. The manifestation is a set of states of matter. The nonzero state of matter is a set of material objects.

(d) Extermination of the objects of the world represents the following action. The creator exterminates the essence (i.e. the information aspect) of material objects. This extermination of the essence is manifested as extermination of material objects in the phenomenon aspect of the world. Extermination of material object (for example, in physical, chemical ways) does not mean extermination of the essence (i.e. the information aspect) of this object: the essence cannot be exterminated in physical, chemical ways. If the essence of an object cannot be exterminate in physical, chemical ways, then a set of forms of manifestation of this essence exists. Since the essence of a material object is manifested in different forms, extermination of material object means only a change in the form of manifestation of the essence,

transition (transmutation) of one form (i.e. one set of material properties) into other form (i.e. other set of material properties).

(e) The complete system represents a system having hierarchical structure: "complete system = controlling system + controllable system". There is a subordination (submission) relation between the "controlling system" and the "controllable system": the "controlling system" is a higher system, and the "controllable system" is a lower system. From this point of view, the system "reality = Absolute + world" is the "complete system", the "Absolute" is the "controlling system" (the controlling, highest aspect of reality), the "world" is the "controllable system" (the controllable, lowest aspect of reality). The logical category "Absolute" is designated by the individual philosophical name "Governor" ("Operator").

(f) Control of the world is carried out as follows: the "Governor" ("Operator") makes an informational influence on the world of material objects for the purpose of controlling. This action is manifested as ordering, stabilization, functioning, change, development of the world. The informational influence upon the object changes the informational content of object. The change of informational content means a change of the material form (i.e. material properties: for example, energy and mass) of the object. The chaos does not exist. Consequently, the controllable material object represents a complex system: the unity of content (i.e. the informational content of object) and form (i.e. set of material properties of object).

This system of statements leads to the following conclusion: the logical category "Absolute" is designated by the individual philosophical name "Creator, Governor of essence and phenomenon", i.e. "Creator and Governor of the world".

#### Identification of God

A logical-philosophical definition of the category "Absolute, Creator, Governor of essence and of phenomenon" allows identifying God, i.e. to solve the problem of unambiguous (one-to-one) correspondence between the main religious and scientific concepts. Comparison of the definition of the religious concept "God" with the definition of the scientific concept "Absolute, Creator, Governor of essence and phenomenon" leads to the statement about identity of the recognizable object "God": there is an unambiguous (one-to-one) correspondence between the religious object "God (Creator, Governor of the world)" and the scientific object "Absolute, Creator, Governor of essence and of phenomenon". This statement can be formulated in the form of the principle of existence and of uniqueness of God: there exists a scientific object "Absolute, Creator, Governor of essence and of phenomenon" which is a unique and correct theoretical model (identifier) of the religious object "God (Creator, Governor of the world)".

Thus, from the scientific point of view, God exists as the Absolute, the Creator and the Governor of essence

and of phenomenon. The scientific concept "Absolute, Creator, Governor of essence and of phenomenon" is identical to the religious concept "God (Creator, Governor of the world)". This statement is based on formal logic and, consequently, represents absolute scientific truth.

Theoretical model of man: a consequence of the principle of existence and the uniqueness of God

The principle of existence and of uniqueness of God is the basis for following statements: Mankind is created by God; the principle of development of Mankind should be considered as consequence of the principle of existence and of uniqueness of God. From this point of view, the principle of development of Mankind can be formulated only on the base of theoretical model of man. The theoretical model of man represents a system of following axioms.

(a) Man is a living, self-regulated system of material aspects. This system represents a unity of opposites: the mental aspect (the mental body, i.e. the active, controlling subsystem, "spirit") and the physiological aspect (the human, physiological body, i.e. the passive, controllable subsystem, controllable machine. The machine is so complex that man can never construct it!).

(b) The mental body perceives, memorizes, processes the information and also transfers (shares, interchanges) the information to its own physiological body and other objects. The brain (as a part of complex machine) transforms the information to the form accessible to comprehension and expression. (Hence, study of the structure and of functioning of the physiological body (in particular, of the brain) does not lead to understanding the essential properties of the mental body. For example, it is possible to offer the following analogy. Study of the structure and of function of a car can give only inessential information about the driver: the driver has four (?) extremities and sensory organs).

(c) Destruction (death) of a physiological body - disintegration of unity of subsystems - does not mean destruction (death) of a mental body. But the death of a mental body - death in the religious sense of the word - means death of a physiological body. Hence, the life is the existence of a mental body. And a physiological body is one of the possible forms (i.e. machines) controlled by a mental body.

(d) The mental body is divided into a set of aspects. The main aspect represents a unity of opposites: intellectual sub-aspect ("individual intellect", "mind") and moral sub-aspect ("individual morals", "soul"). These sub-aspects are characterized by a philosophical category - the measure designating unity of qualitative and quantitative determinacy. Quantitative determinacy of the "individual intellect" and of the "individual morals" is sets of states. Sets of states are characterized with boundaries (intervals) of change of states: from the lowest value up to the highest value. The lowest and highest values are defined by following concepts: "dark

intellect (dark mind)" and "bright intellect (lucid mind)", associated with "individual intellect"; "evil" and "good", associated with "individual morals". These concepts are initial categories. The information about the existence of intellect (mind), of good, and of evil is enclosed in the program of the man. Development of the man is manifested in transition from the lowest states of the mental body into the highest states.

(e) Illness (i.e. the deviation from norm) of a mental body (controlling subsystem) leads to illness (i.e. to a deviation from norm) of a physiological body (controllable subsystem). The information about norm boundaries is enclosed in the man program: the boundaries are observed as states of health (normal or abnormal states). A man as a self-regulated system can restore a mental body to a normal state if he knows what the norm (i.e. correct relation between "evil" and "good", boundaries of "evil" and of "good") means.

(f) Intellectual and moral sub-aspects of a mental body are connected in such a way (manner) that the high intellectual state (level) is a necessary condition for comprehension of the moral sub-aspect, and the high moral state (level) is a necessary condition for the achievement of a high intellectual state (level). Disintegration of this connection (i.e. death in religious sense of the word) means that intellectual and moral sub-aspects are absorbed by the different Highest Aspects: in accordance with selection rules, "soul" is absorbed by the Eden or the Hades, and "bright intellect (lucid mind)" is absorbed by the Supreme Intellect.

(g) A man is the element of the system "Mankind". A man outside the system "Mankind" is an element of another (non-human) system. Properties of system are not the consequence of properties of elements. Properties of system determine properties of elements: the system makes demands of the properties of elements. Properties of elements characterize system: change of properties of elements leads to change of characteristics of system. Hence, social consciousness determines (controls) individual consciousness.

(h) Mankind is an element of the system "Earth". The Earth as a planet represents unity of opposites: mental body (active, controlling aspect) and terrestrial body (passive, controllable aspect). The mental body of the Earth controls the development of Mankind. This control is manifested in the form of social and of natural phenomena. Social and natural cataclysms indicate the existence of boundaries of social consciousness. Hence, the mental body of the Earth contains knowledge of Universe Morals and obeys Universal Morals (i.e. morals in the broad sense).

(i) The informational contact between various mental bodies (manifesting, for example, as telepathy, levitation, telekinesis, etc.) is carried out by means of an information channel instead of energy channel. This contact is carried out without sending of signals (i.e. material carriers of energy, for example, electromagnetic waves) and,

consequently, occurs instantly. The world contains neither material nor informational "emptiness" because the "emptiness" is not the unity of essence and of phenomenon.

Thus, this system of axioms defines theoretical model of man: man is a living, self-regulated system which is created and controlled by God. The theoretical model of man permits to formulate the principle of development of Mankind. The principle is formulated as follows. Correct development of Mankind is the movement of social consciousness from the lowest state to the highest state in the way of correct development of each man: namely, the realized movement of individual consciousness ("individual intellect", "individual morals", etc.) from the lowest state to the highest state.

### Conclusion

Thus, the formulated principle of existence and of uniqueness of God is content and logical consequence of the proposed system of scientific axioms. The built system of axioms as a theoretical model represents the scientific proof of this principle. This principle is absolute scientific truth: it is truth irrefutable within the frame of science, because it is based on correct methodological basis - unity of formal logic and of rational dialectics. This absolute scientific truth is identical to the religious truth given in the Bibles and the Koran. Hence, the principle of development of Mankind is a consequence of the existence of absolute scientific truth. According to the Bible and the Koran, the predestination of Mankind is to serve God (It is possible to offer the following analogy: if the world is similar to a computer, then God is similar to the programmer and the operator of this computer; the computer and the program are means for the solution of the problems that face the creator of the program and the operator of the computer).

Since God exists, the main aim of science as means of cognition is to know Universal Morals (i.e. morals in the broad sense). This fact leads to the statement of a question on the scientific research of the principles of Universal Morals, stated in the Bible and the Koran. As is known, high moral qualities are not a consequence of employment in science. However, scientific achievements depend on moral qualities: for example, in the ancient Greek philosopher Socrates' opinion, the existence of objective truth is a consequence of the existence objective moral principles. Therefore, "the moral qualities of the prominent person are, probably, of great importance for the given generation and for all course of history than purely intellectual achievements. The lasts depend on the greatness of spirit to greater degree than it is usually accepted to consider" (A. Einstein). In other words, the criterion of truth in science, practice, human life, and development of Mankind is the principles of Universal Morals.

The system of correct moral principles - the main content of the Bible and the Koran - is a key understanding the principle of development of Mankind

because the development represents ascension of Mankind on the steps of Universal Morals, and science and practice are a way and means of the development. The principles of Universal Morals should determine a new paradigm, a methodology of science, interpretation of scientific data, a scientific picture of the world and should render essential influence on policy. Comprehension of the principles of Universal Morals, stated in the Bible and the Koran, is the imperative of our time, a necessary condition of the correct (stable and safe) development of Mankind. Hence, the principle of existence and of uniqueness of God should be a starting-point and a basis of the 21<sup>st</sup> century's correct science.

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