

Formation and Development of Scientific Knowledge and Research to the Use of Natural Technologies

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Abstract

The human race came from one blood (Acts 17: 26). The abilities of the soul and spirit of each person are laid down by the Creator for research. The human spirit reflects and fixes the qualitative properties of the perceived environment. The human mind cognizes and explores the observed reality. Through linguistic interpretation and functional formalization within the framework of a theory built with the help of axioms and concepts, it captures the results of research. The functional law of thinking Dao, Chinese philosophers proposed as a law of formalization and quantitative representation of the material world as follows: Dao generates 1, 1 generates 2, and so on; The Dao gives rise to plus, minus, multiply, divide, and other functions. Linguistic thinking generates an interpretation of what is happening in the observed reality. Functional thinking is formed and developed within the framework of axiomatic theory. A theory is built on the basis of axioms and concepts. The theory describes the phenomena, processes, essence of the material world and provides an opportunity to conduct research based on its facts and results. When a person focuses his attention on the relevant research, this indicates that he has the knowledge and skills to work in this area, perceiving the living information of nature and the noosphere. Complex formalization and interpretation of the surrounding reality have led to artificial intelligence, which develops new practical results for a person. Interdisciplinary research provides a more holistic view of the Universe. Actual research at the current time is the construction of the theory, detection, identification and use of natural technologies.

Keywords: research, theory, empirical method, theoretical approach, practical result, natural technologies

1. Introduction

Science is the result of social development associated with human activity, on the one hand, being under its constant influence, and on the other, exerting an active influence on it. It contributes in every possible way to the formation and development of the worldview and the satisfaction of social needs. Science is a

system of knowledge obtained as a result of practice, which includes the study and development of processes and phenomena occurring in space, nature, society and human thinking. Ways of obtaining knowledge are closely related parts—empirical, theoretical, philosophical and practical.

Empirical knowledge includes information

obtained with the help of everyday consciousness and obtained empirically—through observation and experiment. This level of knowledge, despite its apparent simplicity, should not be underestimated. It is thanks to the facts obtained by experience, which cast doubt on existing knowledge or expand the number of facts about still unthought phenomena, that sooner or later they come to the creation of a new theory or concept that explains the patterns that both outdated and new facts obey. Before Copernicus, with his followers, put forward and substantiated the heliocentric system, numerous facts were already known that cast doubt on the truth of the geocentric explanation of the solar system put forward by Aristotle-Ptolemy and dominating for more than one and a half thousand years.

Theoretical knowledge makes it possible, with the help of the fundamental laws of science, to explain and bring disparate facts, phenomena and processes into a certain system. Modern theoretical knowledge arose relatively recently, 300-400 years ago. Mankind long before Newton had known mechanical processes that took place in the world around him, but only this English scientist gave mechanics the significance of science, having discovered at the end of the 17th century the basic laws of motion of bodies and presenting them as an integral system. In addition to the laws that form the basis of theoretical knowledge, this branch of science also includes ideas and hypotheses. Each theory initially acts as an idea or hypothesis, which, thanks to new facts, including those obtained through experiments, turn into a scientific concept.

Philosophical knowledge reflects the interpretation of facts, the use of theory to represent the existing picture of the world or provides grounds for its criticism and support for a new worldview. In public life, the ideological aspect of science is manifested in the confirmation or denial of the fundamental principles of social structure and interpersonal relations, for example, one or another type of government or various forms of ownership.

The practical part of science includes tools, devices, technologies created and used by man to obtain new knowledge. Everyone who is involved in laboratory research is well aware that without the appropriate tools and instruments, they are practically not adapted to

research activities. The task of practical research is the use of the natural environment by man in order to provide the most necessary: food, warmth, housing, perfect tools for achieving vital goals.

Empirical, theoretical and practical knowledge and research will be required to knowledge natural technologies (Evgeniy Bryndin, 2018; Cathal O'Connell, 2018; Bryndin E.G. & Bryndina I.E, 2018; Evgeny Bryndin, 2019; Evgeny Bryndin, 2021; Medium, 2021; Evgeny Bryndin, 2022; Francesco Mastrapasqua, 2022)

2. Approach to Construction of Theory of Natural Technologies

To build a theory of natural technologies, it is necessary to find concepts for a given field of phenomena, express them in a linguistic and functional form, and establish a connection between them. Concepts are developed on the basis of the axioms on the basis of which the theory of natural technologies is built. The connections between the linguistic and functional form of expression of natural technologies are found on the basis of facts and practical results of research. To build a theory, empirical data are involved, which have not yet received theoretical justification. Theory begins with the accumulation of facts and their generalization. They are combined into a single system. In such a system, most of the knowledge is logically derived from a relatively small number of initial statements, which in mathematics are called axioms.

Systematization of the results of scientific research is achieved with the help of theory and makes it possible to obtain new, previously unknown knowledge and thus expand the boundaries of the known; to deepen and clarify the existing ideas about the research area of natural technologies. The construction of a theory involves the use of deeper concepts, laws and facts.

Scientific theory systematizes, expands and deepens knowledge and explains it. When explaining facts and phenomena, one always refers to the laws that govern natural technologies. In science, laws act as part of a theory, so a truly scientific explanation is ultimately achieved only with the help of a theory. Separate empirical laws can explain certain directly observable properties and relations of phenomena, but they cannot reveal their essence, the mechanism of processes. That

is why one turns to theoretical laws to explain them. For such a conclusion, in fact, not only a theoretical law is used, but the whole set of ideas of the theory.

Being the highest form of organization of scientific knowledge, theory increases the level of knowledge reliability to such an extent that its results are usually considered practically reliable truths, are confirmed by practical reliability. Creation of the theory of natural technologies requires a certain cycle of research. Functional mathematical methods are used in natural science and experimental sciences. The interrelation and interdependence of various quantities characterizing processes that are very different in their specific nature can be expressed using mathematical functions. The methods of mathematical analysis of such functions turn out to be the most effective for the quantitative study of the phenomena under study. Modern mathematical analysis has powerful methods for studying various types of functional dependencies, ranging from the classical methods of differential and integral calculus to the latest functional analysis. Probabilistic methods are now widely used; without them, the construction of theories is indispensable either in physics, or in biology, or in sociology, or in economics. Numerical aspects of mathematization of both theoretical and empirical knowledge are the most familiar ways of using mathematical methods. A number of new sections and disciplines have long appeared in mathematics, such as projective geometry, group theory, topology, set theory, and others. They make it possible to adequately express the regularities of real processes in physics, chemistry, biology, economics and technology. The theory of group representations is used in modern physics—the theory of relativity and quantum mechanics. To display objects with hardly imaginable properties of microparticles, modern physics more and more resorts to the concepts and methods of the latest mathematics. The history of the creation of quantum mechanics and the general theory of relativity testifies to the great heuristic value of mathematics in modern natural science.

When considering a theory in its completed form as some result of cognitive activity, the main attention is paid to its structure, i.e., to identifying those basic elements from which it is built:

- empirical premises of the theory: its main facts,

data and results of their simplest logical mathematical processing;

- initial theoretical basis: main assumptions, idealizations, postulates or axioms, fundamental laws or principles;

- the logical apparatus of the theory: the rules for determining derivative concepts with the help of basic, logical rules of inference, or proof;

- all potentially possible consequences, or conclusions of the theory as the main body of theoretical knowledge.

The movement of knowledge of natural technologies comes from incomplete facts to more and more complete information, giving an increasingly accurate representation of the real world. The theory of natural technologies must always and everywhere be supported by evidence and be subject to experimental verification. Experiments must be repeatable. Functional thinking based on experiments reveals the driving forces of natural technologies. This allows you to purposefully use natural technologies with the desired result.

Our relationship with the Universe is based on a resonant connection (Basina G. I. & Basin M. A., 2016). Penetration into the resonant world makes a person's relationship very attentive and sensitive to the Universe. He learns to decipher resonant natural technologies and gradually the keyboard of spectrograms of the Universe opens before him (Evgeny Bryndin, 2022). He feels the spectra that turn on and off the resonant natural technologies. Interactions occur without a logical reason. As a result, a person will be able to activate resonant natural technologies.

3. Properties of Natural Technologies

The existence of the Universe is inseparable from the process of its development. Development is inherent in its essence, its certainty. The development is based on highly efficient, unique natural technologies. Our reality today is permeated with natural technologies for the development of the matter of the Universe. In the organization of our real world, natural development technologies play a major role. Nature uses its natural technologies in the organization of the Universe.

Natural development technology is a clearly defined set of techniques and methods for solving a specific problem of the existence and development of matter, developed by nature in the course of its development (B.M. Popov,

2019). Natural development technologies form the organizational structure of the existence of matter. They answer the question: why does development happen this way, and not otherwise. They establish the order in which development unfolds. At the same time, they are individual, solve specific development tasks that are different from each other, use different techniques and methods to achieve the result of development. Examples of natural development technologies can be: technological processes reflected in the basic laws of dialectics; patterns of development. Correct ideas about natural technologies become scientific knowledge necessary for any modern person in his daily life.

The natural technology of development orientation lies in the fact that under certain circumstances and conditions, changing material forms develop a chain of equally directed changes, in which each new change is a more perfect continuation of the previous change occurring in the same direction. Orientation is determined by the general or main goal of development. The main goal of development is to increase the universal stability of matter in time and space. The directed movement of matter towards the main goal of its development is supported by all its actions and changes.

Phenomena and processes occurring during the development of the Universe, reflected in general and particular laws, in all regularities, including natural selection, strategically contain the need to increase the level of stability. This happens because natural development technologies are formed in such a way that even regression and destruction work to increase the stability of matter as a whole. They transfer energy from weak material forms to stronger, more perfect material forms, thereby increasing the stability of stronger, more perfect material forms. Changes that redistribute and direct energy to the most powerful and perfect material forms, thereby increasing their stability in space and time.

Development—forms a new quality, formation—it increases quantitatively. Nature has developed the ability to consolidate the results of the directed development of material forms and change them. Development has many directions and many options, since interactions in the environment are also many options and many directions. Many directions and many variants in development allow material forms to

choose the best combinations of interactions in their environment, and form the best directions of development, and, therefore, to be individual. The direction of development works to increase the stability of matter in space and time. The cyclicity in the development of the material form lies in the periodic changes in the states of stability to the states of change.

Stepping in development has become a regularity, which is supported by individual natural technology of development. Stepwise development can occur, both in general of the entire quality of the material form, and its individual properties. Parallelism in development is laid down by nature technologically, as a particularly important need for the quantitative expansion of any quality.

Consolidation is more complex in content, forms multi-stage systems, creates new material forms, combining material forms that are diverse in their essence and level of qualitative development. Its technological feature is to improve the organization of the universe. The organization of matter in the process of enlargement, on the one hand, preserves its differentiation, that is, division into various, individual material forms, on the other hand, leads it to integration, that is, to its unification into a single material form, through the interaction of individual material forms. together.

The organization of the Universe and many events taking place in it allow us to see a complex, perfect, organized material substance, which, from the point of view of the human mind, cannot be created spontaneously and unconsciously. In this arrangement, in its movement and change, a consciously reasonable beginning can be traced. Reasonableness in development has become a pattern, having developed its own technology as the most important element of development. In some cases, only conscious intelligence can cope with the problems and challenges that arise. Matter is struggling to increase its stability in space and time, therefore, the direction of the development of intelligence, the ability to control its development, is simply necessary for it, and it must eventually come to the state of its consciously rational organization, since such an organization significantly increases its stability. The living matter of the Earth is perfect in its organization and quite reasonably arranged. Millions of different, independent living

organisms inhabit the earth, acting separately, at the same time they are all a single material system, united by many common structural features and the dependence of coexistence.

The global synergy of the Universe, the dynamic stability of the changing existence, the global harmonious process of the Creator are provided by resonant natural technologies.

4. Conclusion

The deeper and wider a person knows natural technologies, the more comprehensively he can use them. The knowledge of natural technologies is one of the most important factors in increasing the survivability of living matter. Understanding the certainty of our reality by an individual depends on its development in the past and present on the scale of the civilization of all mankind. In fact, the understanding of natural certainty should become the property of civilization.

The identification of natural technologies will make it possible to arrange ecological life activity on their basis on earth and within the Universe. Earthlings will be able to instantly move in outer space, like aliens on UFO (Kaku, Michio, n.d.; Jake Carter, 2021; Evgeny Bryndin, 2023).

The practical possibilities of the natural technologies of the Creator are presented in the Bible at the level of interaction with humanity, especially in the book of the Acts of the New Testament, as the beginning of the formation of the Christian civilization of the future (Evgeny Bryndin, 2023). The natural technologies of the Creator are implemented through the spiritual matter and energy of the Universe.

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