

## CONCEPTUAL INTERPRETATION OF THE INFORMATION PICTURE OF THE WORLD

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**Abstract:** *The author argues that the structure of the scientific picture of the world requires the introduction of a special element that would make the dialogue between science and society understandable and socially accessible. This is the hermeneutic element. Its introduction allows of a deeper understanding, evaluation and acceptance of scientific results in the study of social phenomena and assimilation of scientific worldview systems to social actors. The variety of forms of comprehension and awareness of information reality as a part of social reality leads not only to the creation of new methods for its study, but also to comprehension of its specific forms of existence. The information picture of the world, as stated in the article, is characterized as a form of systematization of knowledge about information reality. What allows considering the information picture of the world to be a certain concept, born in the process of oncoming traffic: from computer science to philosophy and from philosophy to computer science.*

**Keywords:** *picture of the world, informatics, information, concept, hermeneutics.*

The idea of concept was introduced into philosophical discussion by Pierre Abelard in the 12th century. In the twentieth century, this phenomenon was discussed by philosophers, linguists, and culturologists. In scientific discussion, a number of essential features of the phenomenon of concept have been revealed:

- the concept is a model of reality,
- the concept is a multi-valued reality,
- the concept means not the actual being of thought, but its "possible" being, actualized in the concept,
- the concept is the way through which, and thanks to its linguistic form, the world is open to the individual or in other words - it is the entrance to reality (the world),
- the concept is a meaning-generating unit,
- the concept is an instrument of signification of the world,
- the concept is ambiguous, it expresses the duality in its unity – reality per se and the reality of the language - this is the metaphysics of meaning and word,

the concept is a an intersection point of meanings,  
the concept is focused on the meaning, signification, communication,  
the concept is aimed at understanding,  
the concept connects value with everyday life,  
the concept is the result of the "folding" of individual experience into  
"generalized" formulas,

the concept is the local result of the transformation of knowledge into a social product, expressing the tension between science and society, science and culture [1, P. 190-267].

O.K. Rumiantsev expresses the most important feature of the concept, determining, that "the modern reading of the genome ... is that DNA is to a lesser extent a building project for a future organism, but how the environment is given to the body (form). That is, this is the way the world opens to "me". This ambivalence of the genome is the main thing in the concept for us. Then, the concept is an entrance to reality to certain degree (into the world)" [1, P. 210]. But this reality is not in a strict sense conceptually-single-valued, because concept designates not the actual being of thought, but its "possible" being, which in a certain, but already passed moment, is actualized in the concept. Thirdly, the concept as a meaning-generating unit realizes the mechanism of the signification of the world and thereby reveals in its existence a local result of the transformation of knowledge into a social product, expressing the tension between science and society, science and culture. Fourthly, the concept connects value with everyday life, it is oriented towards meaning, signification and communication, aimed at understanding, not cognition. "The main difference between the concept and the concept will be that the concept is ultimately subjective, and in the limit tends to personal transition (objectification of the unobjective), and therefore it is always addressed to another subject or person, even if that person or person is the creator himself or the owner of the concept. The concept can never get rid of the individual expressiveness of the object of its expression, for it the objectified fixedness of the concept, which collects in its synthetic unity the integrity of the conceptually reproduced thing, is alien to it. The concept grasps, but does not fix, because it is aimed at understanding, not cognition. He touches the thing, but does not reveal it as a concept. Therefore, the concept lives in the element of sounding speech, and the concept is localized in a system of interrelated concepts. It is possible to say, that the concept is an individually living metaphor, that breaks any restrictive conceptual framework, and the concept is a frozen metaphor, that carries a constrained concept. The transformation of the concept is realized only through the concept, assembled together in the subject, as the carrier of language and meaning, and the crystallization of the concept into the concept completes the objectifying transition to the state of stability of semantic expression" [1, P. 243].

These essential features of the content of the concept as applied to the interpretation of the picture of the world make it possible to draw attention to the fact, that the selection of specific knowledge and regulative principles of scientific cognition in order to reveal the specificity of the world picture and the features of the

private scientific picture of the world, including information, as intermediaries between science and society, is clearly not enough. To fulfill the picture of the world in terms of understanding, it is necessary to add a sociocultural vocabulary unit (hermeneutic block), through which the private scientific information picture of the world successfully performs the function of understanding between scientific knowledge and society in modern conditions. In other words, the information picture of the world should be interpreted as a scientific and philosophical concept [2, p. 278].

Different branches of modern science, one way or another, take into account information as a factor. "In general, whether we want it or not, we have to admit, that the mighty "genie of information" has already come out of the bottle, uncovered by Shannon, and it is no longer possible to cast it back into the bottle with any spells or magic words. "Genie of information" day by day continues to grow in size, and now it has become huge, like the whole world "[3, p. 25]. The time of information domination, time of its study and systematization of knowledge about this phenomenon in the social world has come. This kind of systematization of knowledge about information reality is the information picture of the world, which is confirmed by a number of reasons.

First, the modern social world is experiencing the information and technical stage of its development, it exists in the form of information civilization. Public consciousness needs a conceptual character of understanding the changes taking place in connection with the revolutionary nature of the use of computer technology, which "enhances" the intellect. On the one hand, such a technique, becoming a means of transition of mankind to a new level of social life, can develop only on the basis of full, reliable and exhaustive knowledge. On the other hand, modern technologies are increasingly concentrated around and based on the production, storage and dissemination of information, while being not content with their previous forms and methods.

Secondly, the picture of the world reflects the basic existential characteristics of man as a subject, who understands and knows the world, therefore, the world picture is transformed in connection with the change in the information environment of man.

Thirdly, an intensive research of information in the 1970-1990s created prerequisites for the allocation of informatics first to a significant discipline and then to interdisciplinary scientific branch of science. It is the development of the information science, which began more than half a century ago, that led to a change in many types of subject practice, activity, and in man per se (which causes a change in the understanding of the scientific picture of the world in its information aspect).

Fourthly, the development of the information based sphere of society has made urgent the problem of the interconnection between goals and objectives, means and tools, values and norms of scientific research. Information technologies in the form of special computing procedures and tools are used today in most scientific areas. The modern scientist acts as a consumer of information products, and the

organizer of the experiment, the designer of communications, the operator of word processing, etc. To effectively solve problems, he needs not only mastering a set of tools, but also understanding the principles, models, schemes, drawing on which he will be able to distinguish what is actually an object of scientific research and what is a tool for calculations, modeling, etc. [4, P. 123-125].

All this leads to a change in how the world as a whole is viewed, and calls for its new interpretation.

For the first time the information picture of the world, in the form of a picture of the information process, was presented by N. Winner. "I never imagined logic, knowledge, and all mental activity as a complete closed picture; I could understand these phenomena only as a process by which a person organizes his life in such a way, that it flows in accordance with the external environment. The battle for knowledge is important, and not victory" [5, p. 284]. Information interaction, as the fundamental basis of the information model of the world, presupposes V.Z. Kogan, describing it as follows: "To begin with, imagine, that the information sphere, flowing around the planet, has the form of a globe and takes the form of a map. We call this flat model an information field. Individuals and social structures that expect or consume information will look on our map as certain points. Now let's imagine, that some amount of information has been "emitted" by someone" [6, p. 15].

V.Z. Kogan considers the historically developed epistemological situation of information interaction as a series of research guidelines: "What does a person do with information?"; "What does the information do with the person?"; "Why do people need information?" And, finally, "How does a person consume information and how is he related to it?" [6, p. 40-42]. And individual's desire to search for, select and consume the information can be constantly and actively felt, regardless of whether the person is aware of the given pattern or not. The moment of interaction is characterized by the fact, that the subject, when transmitting direct information to the object, simultaneously identifies and receives back the information about the object and its changes as a result of interaction. It is important to note that, with no regard to concrete stage of information production, transmission, or consumption, - writes V.Z. Kogan, - in any case, we shall speak exclusively about interaction: both production, and transmission, and consumption would be impossible without any interrelation [6, p. 49].

In addition, V.Z. Kogan stresses the undoubted necessity to take into account the *situation* in which the information is produced, transmitted, or consumed. It is necessary to take into account the state of the production structure, the characteristics of the transmission channel, the cognitive level and readiness to receive information by another person, etc. - in one word, one should have a clear notion about the situational context.

Thus, V.Z. Kogan advances information interaction as the fundamental basis for the information model of the world.

Information picture of the world, so V.A. Izvozhikov, is a model for a multidimensional information space - a set of information spheres, media and streams,

systems, languages, symbols and signs, signals and information semantic connections, that form the Earth's information noosphere and the information space of the Cosmos - the world view in the light of information; the thesaurus of the world's surrounding man, framed in knowledge, is a stock of information accumulated on anthropogenic technical media of information and information captured in a person's memory in the appropriate linguistic picture of the world, which in turn is constructed by transmission of information as a way of accumulating knowledge. V.A. Izvozchikov suggests the following formula [7, p. 18-20]:

Substance – Spirit – Space – Time  
Information (motion) – Information Interactions – Information Processes

V.A. Izvozchikov believes, that "the entire universe, in the light of information-based approach, and allowing for the principle of physicalization of knowledge, can be considered as a super system capable of self-organization and self-management through the information exchange between its parts - information interaction through information processes" [7, P. 18-20].

From I.I. Yuzvishin's point of view, "the information picture of the universe derives directly from scientific and technological progress and the development of society; it adequately reflects reality, is the generator of the formation of a single information-based worldview, and thus - a single global locally distributed information-cellular community and information-cosmic civilization in general" 8, p. 59].

R.F. Abdeev's information picture of the world is a model-drawing of the world around the man as a schematically fixed and interconnected set of groups of objects varying in organization. Citing R.F. Abdeev "the information picture of the world necessarily includes a Man, whose place is on the "border" between natural and artificial nature. It embodies the beginning of the intensification of information processes and the acceleration of scientific, technological and social development" [1, p. 183]. By definition of the author, "the information picture of the world is nothing but the development of the objective world, as a single natural process of the birth and flowering of life and mind, necessary "passing" the entire sequence of steps (forms) of matter, including inorganic nature, flora, fauna (represented by huge number of kinds) and, finally, the Human and human society" [9, p. 182]. R.F. Abdeev is building a large-scale information picture of the world, which confirms dialectics as a process of developing information types, on the one hand, and how the accumulation of diversity (the birth and improvement of information structures), on the other. In spite of the fact, that it is only the first approaching to the solution of this problem, it already makes it possible to visualize, in a holistic and integral manner, the universal ties and interdependence of phenomena in the process of historical development (evolution). "The information picture of the world," the author writes, "especially demonstrates the consistent development of all matter, as the successive accumulation of information, diversity. Moreover, different forms of movement are related to each other not only in terms of the degree of hierarchical complication, but also in the order

of genetic generation of some forms by others "[9, p. 187]. Model of the world picture by R.F. Abdeev clearly demonstrates the dominant in traditional science disciplinary separation of the essence of the surrounding world.

The comprehension of the determining role of information in all evolutionary processes of nature and society opens up, in K.K. Kolin's opinion, a completely new information picture of the world, which is significantly different from the traditional real-energy picture of the universe, which dominated science almost to the end of the 20th century. This picture of the world should be the result of the development of a new scientific and philosophical paradigm, in which the information aspects will be assigned a much more important role than the situation that exists at the present time. The author believes, that "the basic question of philosophy needs a new formulation - as a relation of matter and information in the structure of reality." All components of reality possess (simultaneously) both material (physical) and intangible (informational) properties [10, p. 186].

Of particular interest are the works of G.A. Golitsyn, who not only explores, but also advances options for integration of natural sciences and humanities knowledge [11]. It is extremely important, that the author's research has a solid philosophical and world viewing justification, thanks to which certain isolated facts from various fields of science are combined into a single information picture of the world.

The analysis of author's approaches to the interpretation of the studied world picture has shown that the information picture of the world that is being formed in recent years is unevenly developed: specialists in the field of philosophy, natural and technical sciences actively work with its ideas and images. In their studies, there is a clear indication of the basic concepts of information: attributive and functional. The information picture of the world is defined through the concepts of model-drawing, model, image, information interaction. In this regard, the words of L.A. Mikeskina, who notes, that "the term "picture" is highly anthropomorphic, since it records, first of all, the person's need for clarity in ideas about the world. In modern debates, the term "picture" is often replaced by others: "model", "integral image", "concept", "theoretical analogue of the world", etc. It seems that this fact reflects two significant trends in the development of the scientific picture of the world as a form of knowledge. Firstly, the ways of synthesizing, and interpreting scientific knowledge about the world are subject to change, the transition from the scientific picture of the world as an image, model, visual picture, to the scientific picture of the world as a special logical form of scientific knowledge. The first modification is presented mainly in the ordinary consciousness and at the early stages of the development of science, the second - in a more developed science, and especially modern. Secondly, criticized should be so not the loss of clarity but the historical change in the nature of visualization and the change of objects performing this function: from the obviousness, the "pictureness" of an image and the world to the clarity of the drawing, the graph, and then the formulas and concepts, special constructs (according to V.S.

Stepin), who received operational visibility when designating a certain but fixed modernization of the conceptual set"[12, p. 64-65].

The turn in comprehending the information picture of the world from the visibility to special constructs, as we see after reviewing the interpretations presented above, is far from being completed. In our case, it is more appropriate to consider the information picture of the world for a certain concept, born in the process of this movement. The movement of the oncoming: from informatics to philosophy and from philosophy to informatics. In other words, the scientific picture of the world, including information, is not just a conception anymore, while remaining a concept in real scientific terms.

Thus, the ideas about the information picture of the world mentioned above are very heterogeneous. To bring them into a general order, some idea is needed, some kind of pattern. Such kind of pattern, from our point of view, could be provided by a model for the picture of the world that would take into account its conceptual nature.

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