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ON THE PECULIARITIES OF CORRELATION BETWEEN THE HUMANE SCIENCE AND THE HUMANITIES

The article considers the opinions that were expressed by the Humanities thinkers in the discussions on the issues of globalization, cultural crisis, dynamics of human values and future predictions. However, such predictions are highly controversial as, unlike Physics, Chemistry or Genetics; the Humanities (also known as Liberal Arts) do not have a solid methodological grounding, because the researchers, due to the absolute complexity of their subject, have only limited opportunities for finding the empiric proof of their results. There is a wide-spread opinion that the Humanities occupy a special place among the other subjects, they have their distinctive status. It is said, they are designed to comprehend, understand, not to explain; their mission is to realize a unique individual and his uniqueness in the culture, but not to make generalizations; so, the scientific methods are not simply useless for the humanities scholars, they are usually inappropriate for the subject of their studies. However, everyone accepts the idea that the actually global issues (problems) of the modernity which make merely each and every person concerned, and have need of the instant solutions, – are the issues of the Humanities, indeed. Modern civilization attempts to find solutions of these problems after coping with the economic tasks. Many are the hopes that the solutions will come themselves as the result of the common technical progress. In these conditions, we should start from the basics: what should be considered to be the scientific knowledge, scientific method and scientific theory, where is the demarcation line between the postulations of the scientific nature and other assumptions, which are attributed to the particular sphere of the Humanities?

INTRODUCTION

No-one would argue the value of the scientific knowledge in particular; it can be viewed in two aspects: as the ultimate aim of cognition and as the means of carrying out various tasks of the human existence. These aspects more or less correspond to what E. Fromm defined as the “have” and “be” modes¹: as knowing Math does not mean to be a mathematician or knowing the Grammar does not imply being well-educated. A lot of philosophers and scholars², beginning with Socrates and Aristotle, gave the priority to the knowledge acquisition not to the transient, temporary tasks; they believed that knowledge is immanently precious as it is, while acquiring knowledge is the final target of the human existence. On

¹ See: Фромм, Э. (1990). *Иметь или быть?* 2-е изд., доп. Москва: Прогресс.

² The list of the scientist could be too long to give it here, we can name, for instance, A. Einstein and N. Tesla – who were not only different but opposing in their statements and views on physics.

the other hand, none of them denied the practical value of knowledge; no-one disagreed to consider it from the methodological point of view, – as the means of one's life structuring and organization, solution of the practical problems and way of getting some new knowledge. Even the issues of religion were and are sometimes thought over with regards to the scientific knowledge, when science is adjusted to find the grounding for the religious belief. Some incongruence in the evaluation of importance of knowledge appeared when it was regarded to be only the means, or not more than another one interpretation of the objects and phenomena, on the way of understanding the world, which makes genuine human existence different from the life of, for instance, plants (M. Heidegger).

PART I.

In the broad sense, knowledge is spoken about as any contents of the mind (consciousness) which can be described and presented. Such a notion of knowledge may include something which is called the “prerequisite knowledge”, “prejudice”, “implicit knowledge”, “background knowledge” etc.– though it also should be presented, revealed in order to be regarded as knowledge. The word “knowledge” is as well used to define something that is seen as an obvious fact, and something that is accepted as the principle. For many people, the knowledge acquired from their life experience creates a basis for their views on the world. Moreover, so called “common sense” is often summoned when the assistance in solving political, economic, religious and even scientific disputes is needed.

This particular life experience makes the basis for our natural languages; and knowledge, indeed, requires to be expressed in a natural language. None, even quite the scientific, conception is able to do without knowledge in its broad sense. The essential matter for it is to be available for presentation, also not to lead us to the “inexplicable”, “impossible to express”. This explicitness of any knowledge is one of the most vital features which distinguish it from pseudo-knowledge. However, there is a long list of requirements to the notion of knowledge in a **narrow sense** of the word. The features that correspond with such requirements are not necessarily independent from each other. Beside this, there are many other characteristics of knowledge.

The most important internal feature of knowledge is being substantiated. Knowledge cannot be accepted as scientific until its reasoning (substantiation) is declared. That is why the presence of a description is not a characteristic feature of science; at least not until the conditional (implicative) opinion sentences are presented. The implicative character

of the main facet of knowledge does not mean that any scientific knowledge is knowledge of the reasons. The basis is not always the reason. We should distinguish two pairs of notions: on the one hand, there are ontological notions of the cause and action, on the other hand, logical notions of the basis and consequence. Let us compare the ideas by Aristotle and L. Wittgenstein. Aristotle wrote that we “suppose that we know each object ...when we think that we know the reason for it”¹. L. Wittgenstein says; “In the law court it would convince no-one if the witness simply declared – ‘I know...’ It should be proved that the witness had the ability to know”². Here Wittgenstein clearly considers the *reasoning, substantiation* not the *reason*. In fact, we make our judgments on the economy crisis on the basis of the ratings published with regards to some banks and of the financial conditions in the whole state. However, nobody would say, that those data are the reason for the crisis itself. Aristotle in the above mentioned statement speaks of the ontological, but not logical bases of knowledge, e.g. about the knowledge in Physics, not a physician’s judgments. Correspondently, knowledge as it is does not yet suppose either the scientific nature of this knowledge, or the ability to make predictions based on it.

We should also mark, that any, even the most exemplary, sphere of science cannot as well do without the affirmations which are accepted with no substantiations. Thus, such are the postulates and scientific principles that are used as the means of substantiation. According to L. Wittgenstein’s views, the location of the principles is – “at the bottom” of the knowledge, were the belief reigns³. Apart from this immanent feature, the scientific knowledge also has a number of characteristics of the external type, i.e. not deriving from the nature of knowledge as it is. In addition to the above mentioned trait – explicitness, that means the feature of being expressed in a particular suggested symbolic form (form of signs), there is one more requirement which the scientific knowledge must meet, – its total significance. This feature implies two ideas. Firstly, generalization (inclusion of all the mentioned phenomena), and, secondly, the maximum possible unambiguous meaning of the expression, – when the core sense of the message could be perceived by everyone, at least, by the competent people, in a more or less similar way, within the realms of

¹ Аристотель. Вторая аналитика (71b 10). (1978). *Соч. в 4-х томах. Т. 2.* Москва: Мысль, 259.

² Витгенштейн, Л. (1994). О достоверности (Д, 441). *Философские работы. Ч. 1.* Москва: Гнозис, 375.

³ Витгенштейн, Л. (1994). О достоверности (Д. 253). *Философские работы. Ч. 1.* Москва: Гнозис, 353.

their mutually accepted (inter-subjective) ontology. In order to ensure relatively single (unambiguous) meaning in perception of the messages, the special science languages are used.

The general, common meaningfulness of the scientific knowledge, thus, does not suggest the ability to use only the natural language, as well as it does not mean that the scientific text should be understood by all the people. The commonly available culture is presented in the natural language. Scientific information is involved into it as far as and as much as it is connected with the systems of the people's, belonging to this culture, views. Another significant attribute of scientific knowledge is the fact that it is, by the principle, ontological, in the sense of its belonging to some referent, which exists beyond the boundaries of this knowledge. That means that, at least potentially, any knowledge must suppose more or less commonly meaningful ontological interpretation (or a number of the interpretations) based on some objects, attributes or relations (which do not necessarily exist in the physical world, but as it is said, in one of the possible worlds). The attribute of the principally ontological nature of scientific knowledge does not involve any metaphysical solution in the form of accepting the particular "nature" in the domain of interpretation. Moreover, the ontological basis of science is changeable, relative and on every occasion is defined by the functions. When K. Gödel was working on the problems of the total formalization in Arithmetic, he used the language of calculation expressions as the meta-language. The subject language (Arithmetic) was regarded to be the ontological basis for the consideration. Generally speaking, the multi-level character of knowledge is another attribute of its development and maturity.

As knowledge is ontological, it always tends to set some valency, i.e. it requires the answer to the question of the truthfulness/ falseness (or some other meanings– depending on the accepted logic of the analysis). The many logical bases that allow us to reveal the valency of different types also confirm the maturity of particular science. Also, it is not supposed that all the statements have their valency. For instance, the performatives (the statements that are at the same time acts, such as "I swear to tell the truth and only the truth",) do not possess any valency at all. There is no use speaking about the valency of such sentences as "The citizens of the state have their right for work, rest and education". Listing the above mentioned features, as it is, points at one more attribute of knowledge: it is possible, in its turn, to possess the knowledge *about* the knowledge. The knowledge of science is reflexive by the principle, as it supposes the possibility of the self-reference. If there is science, there should be the corresponding meta-science. However, the opposite is impossible: the

existence of a meta-science does not confirm the scientific meaning of the knowledge about the object.

Finally, scientific knowledge possesses one more essential trait – it is always systematic. A separate simple (elementary) suggestion cannot meet the requirement of the substantiation, so one should turn to some other suggestion, as, to be precise the system of substantiation (reasoning) is needed. We cannot say anything about the valency of the suggestion unless we include it into the system of other suggestions which can say something about the same subject and in the same sense.

To summarize, we should say that in any discipline or any sphere of culture there is knowledge in a narrow as well as in a broad sense, but the knowledge in the broad sense is not sufficient to give an opportunity to speak about the existence of the particular science. So, in which sense is it possible to speak of the knowledge of the Humanities as the scientific knowledge? All the gigantic volume of the texts which were accumulated over the centuries and were attributed to the humanities' knowledge may be divided to the "*humane science*" (regardless of the term presented in the English language scientific tradition, we will use this phrase so on) and "*the humanities*". At first, we can distinguish these concepts on the basis of the spheres and ways of description of their referents. The texts of the first type deal with the answers to the question of the society structure, in particular, and of the place and the functions that a person has in the society and the nature. This presents the ontological (objectivist) approach to a person, such approach is typical for scientific knowledge. In this case, at least one of the mentioned requirements to the scientific knowledge is met, so we have the right to speak about the *humane science*.

PART II.

The texts of another type (the Humanities), in a way, answer the questions of the person's relations with the nature, society and other people; and also relations with knowledge, including the scientific one. In fact, description of the living world is the description of the intentionality. Such intentional character of science is close to that of Arts. The common meaningfulness and unambiguity cannot be imminent for such texts. The authors who created the texts of the second type try to avoid the requirements of the "systematic nature" of knowledge. For instance, the representatives of the Poststructuralist trend, who did not care a lot about the difference between the notions of the system and

structure¹, would rather do without this requirement. And the philosophers of Postmodernism declared that they are against the systematic approach (so, J. Derrida – with the principle of deconstruction, as one can suppose – deconstruction of all the systems of any kind).

On the whole, beginning with F. Schleiermacher and then to W. Dilthey, M. Heidegger, the existentialists and later to the Postmodern philosophy and nomology by G. Deleuze and F. Guattari, the knowledge of the Humanities in the direct or indirect form is opposed to the natural science, referred to by the word *science*. According to Dilthey, if the scientific knowledge appeals to the nomological explanation of the world (summarizing by some common law), the knowledge of the Humanities tends to imagine and understand the individual (often unique) phenomena. It can be easily proven, that none of the texts of ontological character in the Humanities is free from the subjective intentional descriptions, though there were a lot of attempts to create such “pure” texts.

On the other hand, there are no “pure” Humanities. Unless we express our ideas by means of simply interjections, it is impossible to be absolutely free not only from the rational organization of the text itself, but also from adjusting the descriptions to some general notions. Apart from that, if we do not limit the knowledge of the Humanities to the descriptions only, we try to achieve understanding the subject, as it is usually stated (for instance, a person or an object which is named as “the world of life”). In this case the specific function of the Humanities, unlike this of the Science, should be seen in such understanding, comprehension, in particular. However, what is the methodological meaning of this cognitive phenomenon?

Generally speaking, understanding is the universal cognitive operation and, simultaneously, it is the general target. Its aim is to give the sense and meaning to the subject considered. The subject of cognition may be any item – natural or social phenomena, as well as the objects d’art produced by the culture. Due to this reason, understanding (comprehension) can hardly be viewed as the specific procedure in the realm of the Humanities’ knowledge. In addition, nothing in the nature, culture or the cognitive process can be understood completely, absolutely. The reason for it is both in the principally unlimited nature of cognition, and in unavoidable hermeneutic circle, when, according to

¹ U. Eco supposed that these notions are not worth attention as they are vague: structure means “ some unit with its parts and the correlation between them; it is the system in which everything is connected, mutually linked with each other in the whole unit, together with the system of the links... ”(Эко, У. (1998). *Отсутствующая структура. Введение в семиологию*. ТОО ТК «Петрополис», 263.

one of the numerous interpretations of this peculiar features of human cognition, the whole cannot be understood prior to the parts of it, and the parts cannot be comprehended without understanding of the whole. Moreover, as it was noticed long ago, any subject allows the existence of plurality (multi-sidedness) of its understanding. Indeed, the results of any cognition are always subjective, personal, as it is the person who (by the use of the signs systems) attributes some senses to the subject (thing) and indicates its meaning. However, the Humanities do not monopolize comprehension, understanding. In fact, the “humanitarians” (that is what we call the Humanities scholars who want to separate their domain from *science*) went far on the way of describing the subjective character of comprehension. Here is the reconstruction of the text’s meaning resulting from its psychological, stylistic and grammatical interpretation (in hermeneutics by F. Schleiermacher); as well as psychological analysis via the notion of empathy (V. Dilthey and others), also the attempts, on the contrary, to free the texts’ comprehension analysis from the excessive psychological component through the reference to the logical analysis of the inter-subjective constituent in the consciousness (E. Husserl); turning to the cultural analysis of the discourse of various kinds, their author’s and reader’s senses.

The desire to attribute some special humanitarian-methodological meaning to the procedure of understanding was followed by its opposition to the procedure of explanation. It was said that understanding, unlike explanation, is comprehension of the unique and individual, not the common (J. Droysen, W. Dilthey and others). On the other hand, the attempts to take comprehension procedures beyond the boundaries of the traditional methodology made understanding the basic, impossible to be defined, category of any philosophic-anthropological consideration: Heidegger and Gadamer see comprehension (understanding) as the essence of the human existence, the means of self-understanding and self-declaration. Hence, the text is viewed as the subject of comprehension; which (text), with regards to the usual, natural use of the word, was understood in a very broad sense: everything, including the nature (“the book of the nature”), is the text. The latter was given its meaning in the cognitive-cultural context due to the ontology which is predetermined by the particular used language.

PART III.

However, we cannot ignore the methodological weakness of the Humanities knowledge as the whole. In particular, the methodological issues of what we do, i.e. which cognitive procedures (methods) we turn to

when we comprehend, what is the grounding that allows us to consider that in some cases comprehension (understanding) was completed, and what makes it different from “*not understanding*”. And then: how do we distinguish “good” understanding from “bad” understanding, how is any ranging possible in this case? Finally, why do we with equal ease speak of *understanding* the nature and *understanding* a person?

It is remarkable, that all the authors, without any exceptions, while speaking about the achievement of understanding, have always declared that as its result the subject should be presented as the whole (the one). However, the essence of this whole was left out by the analysis, as if the meaning of a word was unambiguous. Meanwhile, a word, often said “accidentally”, not “on purpose”, is meaningful and is able to dramatically change the sense of the problem that is being discussed. The matter is that everyone who tries to understand something (no matter, whether it is a text or a physical item) implicitly suggests that we perceive the subject in parts, and the connection between the parts of the whole is suggested. It is absolutely clear, that such an implicit suggestion at once leads us to the ontological dimension, and so brings the conclusions, we come to, close to the scientific (belonging to science) result.

It reveals the fact, that all the intentions for objectivity and ontological prerequisites are unavoidable in any humanitarian comprehension in the principle; also we can speak of the supplementary (complementary) nature of the humane science and the Humanities. In fact, the correlation between the humane science and the Humanities can be characterized by such feature as:

1) They are mutually exclusive, as long as they have opposite aims (generalization to the degree of the “conscious obligation” and the general laws vs. the description of the only objects and haphazard to the representation of the unique);

2) No-one can represent the subject of the Humanities (a human being, his history and life in the culture) simultaneously by means of the scientific and non-scientific (intentional) “tools”, it can only be done in turns. It is impossible to think at the same time of a person as of the results and functions in life of the society, and life of the society as the result of each person’s acts and functioning.

3) Each of the approaches to the subject of humanitarian studies is actually incomplete, as they presuppose one another. It is impossible to generalize without the reference to the previously formed scientific non-scientific base, because there is no “pure” science. However, non-scientific humanities are also impossible in the “pure” state; the Humani-

ties cannot be free from generalizations, from the categorical statements, from rational text organization;

4) Humane science attempts to, definitely, in a maximally unambiguous way, identify a person's place in the system of life of the society; however, it leaves the humane essence – the people's intentions, undefined. On the contrary, for the non-scientific humanitarian knowledge, the intentional impulses are important, it fixes them (impulses) as the defined ones, but at the same time the social fate of a person is left unidentified.

It would seem possible now to say that the humane science in particular corresponds to the notion of science, meaning actually *science*. Indeed, it should ensure the most vital functions of knowledge – explanation and prediction.

Alas, here we face the ambiguity of the notion of “science” as it is. It is implied, that there are at least two images of science. Firstly, it is the “*strong*” science, which means science in the strictly direct meaning of the word. It is the gathering of knowledge in the narrow understanding of the word “knowledge”, also it produces the knowledge. Secondly, it is “*simply*” science (no-one would like to speak of any science as “the weak one”). Here it goes about science in the wide sense of the word.

Let us think that the *strong* science it is the domain of knowledge which consists of the *strong* theories. These theories are organized not only on the basis of some particular ontology, commonly accepted principles and fundamental ideas, in such a way that they altogether could guaranty relatively *integrated* image of some object, its *comprehension*. The strong theory necessarily contains some means of confirmation or/and contradiction to its own affirmations, it is what is called verification or falsification, and what is aimed on the explanation of the origin, structural features or dynamics of the subject, viewing it through the prism of the common laws and regulations (nomologic explanation), or through the common scheme (paradigm or pattern) of the problem solution. In the strong science explanation can also deal with the purposefulness of the subject's conduct. However, only in the case when prior to this, it is defined that the subject implies some ontological aims (purpose). Teleological explanation in such a case acquires its obligatory and commonly meaningful character. Thanks to the existence of explanations the strong science should reveal its ability to foresee (predict)¹.

¹ That is what, for instance, D. Hofstadter thinks (see: Douglas, R. (1979). *Hofstadter: Gödel, Escher, Bach: an Eternal Golden Braid*. New York, Basic Books; на рус. яз. – (2001). Гёдель, Эшер, Бах: эта бесконечная гирлянда. Самара: Изд. Дом «Бахрах-М», 295-317). He speaks of an anthill as the whole (not an individual

As the *good* method we consider not simply the means but the rationally controlled way of the cognitive activity organization. The method in science is a clear and apparent instruction on the consequence of the operations which are necessary in order to get the result without breaking the rules of the accepted logic. Method is something that can be reproduced: any other researcher should have an opportunity to control the results that he got by means of the same method.

Adequacy of the scientific method can be confirmed if two conditions are fulfilled. To become a mean of the impact on the subject researched, the method should, firstly, be relevant, i.e. it should be suitable, appropriate, according to the sense of the task which it is applied to.

Secondly, the adequate method should be divergent, which means that it must be different from the problem by means applied to present the task that is dealt with. In general, if the task, for instance, is of the theoretic nature, it is expected that for its ultimate completion it is necessary to apply the empiric means. And on the contrary, the empiric problem can be considered in the theoretic sphere.

It is obvious, that the empiric problems can often be solved by the empiric means; however, in this case this empiric means should be altered. If not, the solution **can be** successfully found either accidentally, fortuitously or by the way of experiments and errors. The above mentioned, if it is not rationally organized and purposeful, can only be called a method in the wider sense of the word¹. The theoretical tasks are often completed via the theoretic means but always with the help of the *different* theoretic means, the means of the different theoretic language. The unbelievable effectiveness of mathematics while solving the problems of physics, technology or even some issues of the Humane subjects is possible because of the fact that mathematics presupposes the different languages – provided the first condition of the adequacy is completed – its relevancy, appropriateness for its sense. Alchemists became real chemists only when they succeeded in their science by means of the special language. The comparison to with the process of translation into

ant separately) as a purposeful acting system, he even created a special character – Ant Hill.

¹ When C. Popper said that the method of experiments and errors (mistakes) is almost the main in science he intentionally emphasized that it was about the empiric confirmation / contradiction of the theory. He noticed, that observations are rarely accidental as they are made with some particular purpose: to verify some theory to get, if it is possible, it's crucial/fundamental contradiction.

the foreign languages is suitable here: if someone decided to translate, say, an English book into English again, it would not be the translation, it would be editing.

CONCLUSION

So, the *good* method in science is the purposeful, determined, rationally controlled aggregate of operations that are aimed on the completion of the cognitive tasks. These operations should be adequate (relevant and divergent) to the tasks themselves. A method implies a particular sequence of actions which gives an opportunity of its reproduction to the others who use this method. The rational character of a method means, particularly, that the knowledge about the method is the scientific knowledge itself. From this we may conclude that a method should possess all the features of knowledge, thus, the possibility to confirm (verify) or contradict to the results derived from its application.