Knowledge in the Age of Information: the Science and the Human Values

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Our days are often being referred to as the age of information. The development of information technologies, proliferation of computer devices and spreading of the Internet has led to rather radical transformation of lifestyle and working methods in many areas of human activity, and especially in scientific investigations and higher education. Just twenty or thirty years ago, undergraduate students used to study almost in the same way their parents and the parents of their parents did a decade or a century before, facing some difficulties while accessing new sources, especially those of foreign origin, but being quite good at using traditional libraries, – while the present generation faces completely different, sometimes even opposite problems. Particularly, those are the problems of successfully distinguishing primary and reliable sources from secondary and dubious ones, due to virtually limitless information repository of the knowledge of human civilization now being available to anyone with the Internet access.

In my opinion, the most important issue in this situation of the information age is the necessity to distinguish between the two notions: knowledge and information. While closely related, they are in no way identical in their meaning: information could be presented an alienated knowledge, as a depersonalized knowledge, a knowledge deprived of its subject-carrier and made available for transfer, even for sale. On the contrary, knowledge could be best defined as adopted, ‘digested’ information – the information made personal, the information processed through the whole complex of human nature including not just rational mind that has to assert that information as being true, but also the will and the emotions that evaluate it on the basis of desirability and acceptability. In other words, the availability of the vast volume of the information in the today’s world should not lead us to the illusion of the availability of knowledge: it requires a lot of personal efforts for a human to transform the former into the latter, and no one could bear that responsibility except the very subject of the knowledge in question.

The idea of personal, tacit knowledge expressed in the philosophy of science in the 20th c. by Michael Polanyi is reflected in the conception of post-non-classical science proposer by Vyacheslav Stepin, as a definition for the contemporary qualitatively new type of scientific rationality as a kind of methodological successor for classical unity and non-classical radical plurality while dialectically combining unity in plurality and developing non-linear thinking. According to Stepin and his followers, currently we experience the fourth global scientific revolution leading to the formation of the new type of scientific rationality the features introduction of human cultural values into the very core of scientific knowledge as science turns its attention toward complex objects that are found to be “human-
commensurable”. While classical scientific knowledge was thought to be free of any values, under the paradigm of post-non-classical type of scientific rationality it is revealed that its knowledge is actually value-ridden, both by the norms of the scientific ethos and by the much broader cultural value background.

The knowledge of science becomes now more close to that of humanities and philosophy, it is the Weltanschauung generative knowledge, consisting of not so some ‘ready-made’ and certain information about the world, even if it is accepted and personalized by scientific community or individual persons, but of certain premises, scientific and philosophical basis that enables a human person to constantly create one’s own knowledge by applying an interpretation taken out of the set of personal senses to the objective empirical data. That could lead to some specific changes in the methodology of scientific investigations and in the strategies of the contemporary higher education. Particularly, it is no longer sufficient to have a set of ‘competences’ as a final result of the educational process at today’s university, that is, to define some specific knowledge and skills that a graduate must acquire in accordance with the ideas of the 20th century. Instead of it we now have to aim at a holistic personality endowed with certain human qualities, certain values and modes of existence that would allow a person to deal with the challenges of the new, constantly changing circumstances in the word of complexity and uncertainty. From the paradigm and methods of ‘informing’, as in the form of classical ‘teacher to student’ one-way interaction, where the former used to transfer knowledge and skills to the latter, we now move not so to the subject-subject communication (where the two democratically equal subjects exchange knowledge and opinions), but to a kind of moderation. Instead of being a mentor who possesses unique knowledge and is able to pass it on to the next generation, the university professor becomes a supervisor who is to help his or her undergraduates to navigate through the boundless ocean of available and accessible information in order for them to choose and create their own, personal knowledge out of such information.