Homo Economicus as the Basis of "Asgardia" Nation State in Space: Perspective of Educational Technologies

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This paper considers the perspective of using the concept of Homo economicus as a cultural ideal. According to the authors, modern educational technologies must be directed to achieve this cultural ideal. The concept of education is understood by the authors in the classical interpretation, as deliberately molding human character. The authors use the historical method, formalization method and others in this paper. It has been proved that all constructive criticism of old interpretations of the concept of Homo economicus does not deny the possibility of using this term in the foreseeable future. On the contrary, criticism gives new interpretations of Homo economicus, which open up new prospects for using this concept, in particular, as a cultural ideal for educational technologies when creating the "Asgardia" nation state in space.

Key Words: Homo economicus, education, cultural ideal, future human image, Asgardia

Introduction

We will consider one of the possible prospects for the development of modern education in this study. Moreover, the authors understand that the "perspective on the development of modern education" is a whole problem field of the philosophy of education, which was researched in many scientific studies. For example, this problem field was researched by some scientists such as Oleg Bazaluk [Bazaluk, 2015], Galina Beregova [Beregova, 2016], Lidiia Fedorova [Fedorova, 2016], Denys Svyrydenko [Svyrydenko, 2016], Valentina Voronkova [Voronkova, 2016], etc.

The concept of education is understood by the authors in the Attic interpretation. In this issue, the authors are based on the definition of education, which was formulated by Werner Jaeger who is a recognized authority in this field of study. In his book "Paideia: The Ideals

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of Greek Culture" Jaeger writes, "They were the first to recognize that education means deliberately moulding human character in accordance with an ideal" [Jaeger, 1946: xxii].

Thus, when we consider a perspective on the development of modern education as a scientific problem, we must solve at least two problems:

1. To define an ideal, with which the deliberately molding human character will be carried out.

2. To prove the expediency of achievement of a cultural ideal, which was formed by us for civilization.

Homo economicus in the classical interpretation

In our previous studies, we paid much attention to the problem of the features of human existence in the sociocultural space in the Age of Globalization and the Information Revolution. For example, in the book "The Philosophy of Market Relations" we examined the diversity of interpretations, which are embedded in the concept of Homo economicus, as well as the importance of these interpretations in the Age of Globalization and the Information Revolution [Oleksenko, 2013; Oleksenko, 2013a]. Based on the results of the research of John Stuart Mill, Adam Smith, William Stanley Jevons, Vilfredo Pareto and other economists, we examined the classical interpretation of the Homo economicus concept.

For example, in the 19th century John Stuart Mill wrote about Homo economicus: "It is concerned with him [man] solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end.... It makes entire abstraction of every other human passion or motive; except those which may be regarded as perpetually antagonizing principles to the desire of wealth, namely, aversion to labour, and desire of the present enjoyment of costly indulgences" [Mill, 1844: 321].

Historical Antecedents the birth of Homo economicus as we understand the concept nowadays can be found in the work of Carlos Rodriguez-Sickert [Rodriguez-Sickert, 2009].

Criticism of the concept of Homo economicus

From the outset, the term Homo economicus carried a pejorative connotation. Back in the 19th century, John Kells Ingram caricaturized Homo economicus by demoting him from the genus Homo and declared it a "money-making animal" [Ingram, 1888]. Among the critics of the concept of the Homo economicus we can call such economists as Thorstein Veblen, John Maynard Keynes, Herbert A. Simon, etc. and such economic anthropologists as Marshall Sahlins, Karl Polanyi, Marcel Mauss, Maurice Godelie, etc.

For example, let us consider the criticism of Homo economicus by Peter Weise (German economist). Weise not only distinguishes human images in sociology and economic theory, but he is very categorical in his conclusions. Considering the image of man who meets the requirements of social sciences, Weise comes to the conclusion that Homo economicus and Homo sociologicus are special cases of Homo socioeconomicus, which can exist only in the world of equilibrium, but not in the world of disequilibrium. According to Weise, the concepts of Homo economicus and Homo sociologicus exist only as theoretical abstractions and no more [Weise, 1989: 160].

Here is another example of criticism of the concept of Homo economicus. A Swiss economist Bruno Frey notes that economics tends to become a branch of applied mathematics; the majority of all publications in professional journals and books are full of axioms, lemmas and proofs, and they are much concerned with purely formal deductions. However, Frey defends another point of view and believes that economics is a social science. Therefore, economics as a social science has every right to offer its concept of man or a model of human behavior. This model is slightly relevant to the concept of Homo economicus as consistently rational and narrowly self-interested agents, because this interpretation of the concept of Homo economicus are excessively formalized and torn away from real human behavior. Therefore, in his interpretation of the concept of theory, but as a subject of research and as a key structural element of social relations [Frey, 1992].

The interpretation of Homo economicus was criticized a lot, and deservedly. We wrote about this in our studies (e.g. Oleksenko's studies [Oleksenko, 2013]). A comment about the concept of Homo economicus is presented, for example, in the studies of Bruno Frey [Frey, 1992], Carlos Rodriguez-Sickert [Rodriguez-Sickert, 2009], etc.

Analyzing the constructive criticism of the interpretation of Homo economicus, we come to the conclusion that, in fact, the criticism of Homo economicus not only refutes and denies the use of the concept, but gives new interpretations to it and expands the scope of application.

This applies, above all, to the expansion of the interpretation of the concept of Homo economicus due to achievements in the field of cognitive psychology and neurophilosophy. In this case, Homo economicus moves from the formal mathematical term to the domain model, projected and managed by educational practices. It becomes possible to apply to Homo economicus the formative forces, which, according to Protagoras, are the act of shaping the soul [Jaeger, 1946].

New interpretation in the concept of Homo economicus

In modern economic theories and game theory, Homo economicus is considered as consistently rational and narrowly self-interested agents who usually pursue their subjectively-defined ends optimally. Generally, homo economicus attempts to maximize utility as a consumer and profit as a producer. The modern interpretations of the concept of Homo economicus are considered, for example, in the works of Bruno Frey [Frey, 1992], Wolfgang Stroebe [Stroebe& Frey, 1980], Peter Weise [Weise, 1989], Richard H. Thaler [Thaler, 2000].

The basis for the modern interpretation of Homo economicus was formed in the paper "In Defense of Economic Man: Towards an Integration of Economics and Psychology" by Wolfgang Stroebe (Professor of Psychology) and Bruno S. Frey (Professor of Economics). Analyzing previous interpretation of Homo economicus in economic sciences, the authors came to an understanding that consideration of Homo economicus outside of psychology and its achievements in modern realities is incorrect. The main idea of the paper is "psychological man" who is a close relative of "Homo economicus" [Stroebe& Frey, 1980: 120].

Further developing the main ideas of his predecessors, in his paper "From Homo Economicus to Homo Sapiens" Richard Thaler argues that, for objective reasons, Homo economicus will become a slower learner [Thaler, 2000: 135-136]. That is, unlike the classical interpretations which represent Homo economicus as a formal concept in economic theories, the modern interpretation of Homo economicus has changed qualitatively. We are talking about the possibility of learning Homo economicus and, accordingly, about the distinction of psychological properties in Homo economicus corresponding to Homo Sapiens [Thaler, 2000] or Homo Sociologicus [Weise, 1989].

Considering modern interpretation of Homo economicus, Thaler comes to an important conclusion that the models of quasi-rational emotional humans and the interpretation of Homo economicus changes significantly due to the fact that the models of rational, unemotional agents, within the boundaries of which Homo economicus is traditionally considered, move to a more complex level [Thaler, 2000]. It is important for our study. In turn, Denys Svyrydenko talks about complex changes of anthropological nature, which was initiated by the "mobility turn" in the life of modern society: "Contemporary society lives at "the coordinates" of mobility and modern individual needs to transform one's own everyday practices to stay at the advance-guard of the social development, to perform successful carrier steps etc... According to "mobility turn" at the modern humanities and social sciences, mobility starts being comprehended as part of individual, information, idea, value attribute" [Svyrydenko, 2016: 103]. We think that it is necessary to take this trend into account when we consider the image of Homo economicus in modern education.

Expanding Homo economicus of interpretations from cognitive psychology and neurophilosophy allows us to find classical interpretations originating from the Greek paideia, which Plato was perhaps the first to use the word mold, $\pi\lambda \dot{\alpha}\tau\tau\epsilon v$, for the act [Jaeger, 1946: 314], and not those classical interpretations of this concept, which were given by John Kells Ingram or Peter Weise [Ingram, 1888; Weise, 1989]. It is these interpretations, which later the Romans accumulated in the concept of "humanitas", to transform Homo economicus into a cultural ideal. Therefore, a variety of educational practices, which are written by Werner Jaeger [Jaeger, 1946], Oleg Bazaluk [Bazaluk, 2014], Olga Gomilko [Gomilko et al, 2016], Denys Svyrydenko [Gomilko et al, 2016], are intended to achieve this cultural ideal.

We can cite the scientific study by Daniel Kahneman (the 2002 Nobel Memorial Prize in Economic Sciences) and Amos Tversky [Choices, 2000] as an example of new interpretations of Homo economicus from the field of cognitive psychology. In this study, the authors discuss the cognitive and the psychophysical determinants of choice in risky and riskless contexts. Furthermore, they propose prospect the theory. Extensions and applications to diverse economic phenomena and to studies of consumer behavior are discussed [Choices, 2000].

We will consider the expansion of the interpretation of Homo economicus by studies from neurosciences using the example of the research paper "Neurophilosophy in the Formation of Planetary-Cosmic Personality" by Oleg Bazaluk [Bazaluk, 2014]. In this paper, the author considers the spectrum of neurophilosophy possibilities in the formation of planetary-cosmic personality. The author considers a human development strategy from neural ensembles to moving forward. He also introduces new concepts and interpretations which are used in neuroscience. These are such concepts as "neural ensembles of subconsciousness and consciousness", "neuroevolution", "Intelligent Matter", "mentality", etc. [Bazaluk, 2014].

Thus, new interpretations of Homo economicus not only radically change its interpretation, but also indicate the direction of further transformation of the concept and scope of application. Homo economicus reaches new levels of interpretation, if we project it onto the future human image. These levels of interpretation are a creation of "Asgardia" nation state in space.

The role of Homo economicus in the creation of "Asgardia" nation state in space

Concept "Asgardia — the Space Nation" by Dr. Igor Ashurbeyli presented at the pressconference in Paris on October 12, 2016. The project's concept comprises three parts — philosophical, legal and scientific/technological [Ashurbeyli, 2016]. The Asgardia project is being directed by the Vienna-based Aerospace International Research Center, a private company founded by Russian scientist and businessman Dr. Igor Ashurbeiyli.

Asgardia is a new pacifist nation-state in space. This project is interesting for us because its organizers were a businessman and a group of scientists who uses interpretations on the borderline between futurology (and probably phantasy) and economics. "The group says it will open up new opportunities in space for commerce, science and "peoples of all countries on earth" [Scientists Plan, 2016].

In the project's concept "Asgardia — the Space Nation" it is worth paying attention to the fact that the future human image in it will not be divided into science and technology. Moreover, in this respect, Homo economicus as the future human image is the most suitable in a variety of new interpretations. Volodymyr Khmil and Tetiana Khmil argue that understanding and reasoning of paradigm systems development based on moral constituent of the state is an anchoring point for the reforming state towards human values [Khmil & Khmil, 2015].

Let us pay attention to the research of Sergey Krichevsky, Arkady Ursul, Eduard Vitol, Tetiana Danylova, etc. [Krichevsky, 2015; Krichevsky, 2016; Krichevsky, 2017; Ursul, 2017; Vitol, 2014; Danylova, 2016]. For example, Sergey Krichevsky has formed the basis of the management concept of the technosphere's evolution consisting of two blocks such as: 1) a conceptual model of the technosphere structure and the process of the technosphere's evolution; 2) a conceptual model of the management system of the technosphere's evolution. Krichevsky suggests the management system structure of the technosphere's evolution and the strategy which is aimed to achieve three main goals: 1) saving the Earth's biosphere; 2) security, survival and sustainable development of humankind in the balance (co-evolution) with the biosphere and the environment on the Earth and in the Solar system; 3) the creation of the conditions for disclosure and the use of the potential of technologies, equipment, technical development to manage the future, the implementation of the transition to the noosphere, the attainment of human immortality in the Universe [Krichevsky, 2015; Krichevsky, 2017].

Homo economicus as an ideal of deliberately moulding human character

The previous analysis allowed us to consider Homo economicus in a completely new format. Firstly, Homo economicus has classical interpretations, which allow us to examine a man as consistently rational and narrowly self-interested agents. That is, we can use interpretations contributed to Homo economicus in the 19th century by John Stuart Mill, Adam Smith, etc. Secondly, Homo economicus clearly discerns the interpretations, which were formed by Wolfgang Stroebe, Bruno S. Frey, Richard H. Thaler in the twentieth century.

Homo economicus "becomes human." Namely, Homo economicus as a concept begins to be used not only in statistical economic theories, but also in dynamic i.e. it gets more close to reality. It was seen that Homo economicus has the cognitive and the psychophysical determinants of choice in risky and riskless contexts (in the understanding of Daniel Kahneman and Amos Tversky [Choices, 2000]). Finally, thirdly, the concept of "Asgardia — the Space Nation", which was developed and proposed by the economist-practitioner, opens a new field for the use of the concept. This concept is futurology.

Thus, Homo economicus has moved from a formal agent of economic theories to a qualitative new level. We take into account the reality of the prospect of creation "Asgardia" nation state in space and emphasize that a new point of Homo economicus is a cultural ideal of

deliberately molding human character. Homo economicus enriched by new interpretations can be considered as a cultural ideal. Moreover, modern educational technologies must be directed to achieve this cultural ideal. In the foreseeable future, Homo economicus, as a cultural ideal, may lead to the creation of "Asgardia" nation state in space. In Asgardia, Homo economicus will become the fundamental unit of the new nation, which will embody the harmony of rational and ideal beginning. Perhaps even thanks to the new interpretations of Homo economicus, Asgardia will become a practical embodiment of the ideal state, which is defined by Plato in his work [Plato, 1994].

Conclusion

Thus, returning to the perspective of the development of modern education as a scientific problem, we come to the following conclusions:

1. New interpretations, which significantly change understanding and expand the scope of the concept of Homo economicus, allow us to consider it as a cultural ideal. Deliberately molding human character can be carried out according to the cultural ideal.

2. This cultural ideal is necessary and important to civilization. It is proved, for example, by its effectiveness in the creation of "Asgardia" nation state in space.

In this paper, we proved that all constructive criticism of old interpretations of the concept of Homo economicus does not deny the possibility of using this term. On the contrary, criticism gives new interpretations of Homo economicus, which open up new prospects for using this concept, in particular, as a cultural ideal for educational technologies.

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