

Anthropogenic social development, consequence of it, necessity of mass education and life reconstruction

E.S. Demidenko

State educational institution of higher professional education

“Baltic federal university of I. Kant”, Kaliningrad, Russia

demidenko@mail.ru

The article presents an idea on development of anthropogenic social systems at our planet, demonstrates how they replace traditional agricultural models, shows their basic features and formation of sociotechnonatural world and new forms of life that are replacing former biosphere forms. The author refers to a large volume of statistic and sociological material to show the direction of elementary transformation in terrestrial life, explains how its forms transit from biosphere to technosphere, and what results it can produce in the end of current and next century. Reader's attention is concentrated on formation of a new world outlook, different from one, currently acknowledged by philosophers and scientists. According to their analysis of the world sociotechnonatural events that concern end of biosphere and formation of technosphere world, the author provides certain recommendations in the area of turning science and mass education towards preservation of biosphere and biosphere life.

Key words: biosphere, turn of life evolution, technosphere, anthropogenic society, transformation of biosphere life.

Nowadays human world and world of biosphere nature are not only developing and transforming in relation, but also change in a conflicting fashion. This fact forces us to search for new factors of such changes, analyze positive and negative consequence of various type of influence, coming from scientific humanity, machine technics, technosphere, and many other factors in transformation of life processes. Unprecedented changes in society and through it – natural world enforce the author to form scientific-philosophic outlook of natural life progress, define its perspective for the closest and more remote periods. We should not forget the fact that philosophy never knew a single or universally-accepted role of science, technics, and technosphere in development of life on our planet. Nevertheless, the author makes an effort to form a scientific-philosophic understanding of anthropogenesis processes in modern evolution of biosphere and life perspectives according to statistic and sociologic material as well as current direction of its development. And, though philosophy on the whole and particularly philosophy of social life have created their special methods of research and special philosophic language, trying to avoid statistically and sociologically formed facts, mainly founded upon the revealed critical trends in social and natural development, we cannot accept it in the era of rapid changes in social life and biosphere as well. The volume of changes, their speed and direction, registered with a serious scientific analysis not only in the area of philosophy itself, but also a great number of other disciplines, can give us valuable answers to the most critical questions of the undergoing transformational change in modern world.

In XIX-XXI centuries evolution of life in organically related, as it has never been before industrial revolution, to the complicating anthropogenic social development. The former is not limited by presence or spread of technics and technology, but creates a special conditions of human life and biosphere nature in which social (socio), artificial (techno), and biosphere (bio)

phenomenons and processes integrate, thus changing and transforming flow of evolution in century life of planet Earth. Comprehension of such unseen mass phenomenon takes its roots in study of biosphere and noosphere that is far from synonymous, originally created by Russian scientist and philosopher V.I. Vernardskiy in collaboration with his French colleagues in research – P. Teilhard de Chardin and E. Leroi.

While studying biosphere and creating an integral concept of it (1926) V.I. Vernardskiy makes a certain discovery concerning the role of Homo sapiens in life of planet. He notices that while earlier image of our planet changed due to totality of life substance activity, now it is changed by one single creature – human. In his thoughts on biosphere theory, E. Leroi forms a new concept – “noosphere” (1927) as a certain result of influence, received by the only lively organisms - homosapiens that transforms our planet with their mind. V.I. Vernardskiy agrees with this term and comes to a conclusion on that the humanity will create a new biosphere of higher quality, as agrarians did via cultivating new plants and breeding domestic animals. We should also mention that P. Teilhard de Chardin paid his attention to the fact that humanity creates and artificial world, and gradually the artificial replaces the natural. No one supposed that the “artificial” would unfold so widely and bury all natural. And this funeral, as known Russian philosopher N.A. Berdyayev outlined in his work “Human and machine”, was undertaken by machine, its creator “bourgeois-capitalistic society”. He was probably the first one to ever write on a deep conflict of technics and machine emergence. “The most revolutionary, radical event of world history is emergence of technics as a factor that prevails in human life, triumph introduction of the machine that defines the whole structure of civilization [1, p. 271]. At the same time, he claimed in conviction: “We stand before the main paradox: without technics culture is impossible, it defines the very emergence of culture; and the final victory of technics in culture, arrival in technical epoch leads the culture to death” [2, p. 149].

The author refers to problems of understanding noosphere by Vernardskiy and his colleagues only in thesis as it is obvious that humanity does not construct any noosphere from biosphere, it raises multi-million cities through destruction of biosphere and its foundation – soil surface. The author has to demonstrate the same statistic and sociological data repeatedly in order to convince not the population, intoxicated by “anthropogenic nutrition”, not mentioning machines, cursed by N.A. Berdyayev, but convince successful scientists and politicians, the world elite in necessity of changing the whole way of life on the planet, end exploitation of human and biosphere nature, and continue saving what remains of life on our still lively planet.

Philosophy occupies its special place in world cognition and comprehension. Unlike science that “tore” the world into specific parts while studying it and named them natural or social objects with their own special features and laws of development, while all research objects

are separated from each other by definite, although conditional, boundaries, philosophy studies the world as an integral, continuously developing whole. While studying the world, philosophy, unless it aims to “be in the clouds”, has to found its search upon achievements of all scientific disciplines, and such, acknowledged by scientific society, are more than five hundred. But, it is not enough: the scope of philosophic reflection embraces non-scientific knowledge, social-cultural values, multi-century experience of humanity development in relation with the world, and many other aspects. Not only from the tower of one science, even the highest, which is, for example, biology, it is impossible to comprehend the evolutionary world, neither can it be totally embraced from the “Babylon tower” of philosophy, even by summing and integrating all disciplines of science. Philosophy is not science of all sciences, as it is usually called. More and more frequently it plays an integrating part, as through its “all-seeing eye” and with its generalizing view of phenomena, processes, and events philosophers and scientists are able to analyze interacting parts of the world, take and describe them in form of a systematized evolving whole. It is not occasional that in New are philosophy of history begins to develop, and then – philosophy of technics and science, in the end of the XX century – sociology and philosophy of urbanization and philosophy of social-anthropogenic development of world [3; 4], philosophy of artificial world [5], and from the beginning of the XXI century – philosophy of technosphere and technospherization [6; 7], then – philosophy of sociotechnical globalization [8; 9], etc. These aspects allow the “all-seeing eye” gradually make its way, as through the jungle, towards content and essence of the complicated world, that gets even more complex under the impact of machine.

So, how are the essential features of the developing anthropogenic society expressed?

One of the most important essential feature of it is *formation of qualitatively new productive factor* – scientific technical force and its powerful scientific and technical-technological foundation, machinery, power, and most complicated tools of labour. These factors came to replace natural-biological, agricultural forces, and excelled them thousand times in technical-technological power and efficiency. One of the basic characteristics of it is *formation of technosphere as a new home for humanity and cultured organisms, based upon industrialization, technical-technological modernization and urbanization, growing anthropogenic transformation of biosphere nature and especially human organism, way of life and population culture.*

The point in this case is in rapidly complicating processes of not only social development through implementing achievements of science, technology, and technics, but also social-natural evolution of the world. By now the leading side in development of life on our planet is not *biosphere* with its natural resources, accumulated in process life development, but *anthropogenic society* that develops rapidly and thus alters biosphere world, its natural surroundings.

At first this society was called industrial, but now, by initiative and logic of D. Bell it is studied as postindustrial, a society that overcame all dirt and fear of industrial development. Yes, the most developed countries of the world that modernize and transit hazardous production to other countries, can be referred to this stage of development. Scientific works by authors of Bryansk scientific-philosophic school study these problems in a number of monographs [10; 11; 12; 13; 14; 15] that explain the real (although “scary”) picture of the dying earth, neglected by scientists who prefer to study its particulars. However, author of the article takes the whole world to analysis, opening its far not the most tragic phenomenons and processes.

Construction of technosphere as a post-biosphere artificial home is testified by the following data. During almost 7 millennium of forming cities on the planet, in 1800 only 5,1 of earth population inhabited urban areas. From this moment begins a breaking industrialization and urbanization as one of stages in planet technospherization. By 2016 population of earth grew 8 times (from 0,91 billion to 7,3 billion people), urban population – 80 times (from 0,045 billion to 3,7 billion people). In XIX century transition of animals from biosphere life conditions to technosphere begins along with urbanization. In 1860 5% of animals in their mass, including human, are located in artificial life conditions, in 1940 – 10%, in 1980 – 20%, now it is 40% [16, p.253], by the end of XXI century this value will grow up to 75-80%. We should also consider that about 55% of planet grounds are anthropogenic and technical, they used to be natural soils [17, p. 43-44]. 2 billion hectares of ground surface has been used by humanity during 10 thousand years of agricultural period (1 billion hectares) and three centuries of industrial development since 1700 until 2000 (0,7 hectares), it is pointed in the book “Globalistika: Encyclopaedia” [18, p. 350-353]. The exploited 1,5 billion hectares of half-destroyed soil will be enough for one and a half century, and the undeveloped 1 billion hectares of ground – for another 30-40 years, according to doctor of biology, soil researcher of Moscow state university A.S. Yakovlev [19]. But where do grounds with rich soil humus? We don’t sell them, but throw away from life film – without any mercy or concern, without thinking of life after our generation, without thinking of ourselves, not leaving any memory of our close ones, as there will no one to keep it in two centuries.

While in 1920-ies, according to the data of a well-known Soviet biologist – soil researcher V.A. Kovda, 3 billion tons of humus (organic) was dumped into seas and oceans annually, in 1970-ies – 24 billion tons [20, p. 149,156], now the dump volume equals more than 30 billion tons. Mathematics of dump in this case is very simple: half of total harvest, gathered in the country, is transported to cities. Whilst in village the consumed and collected part of biologic substance is put into Earth and produces a part of new harvest, all waste, produced by cities, is washed into seas and oceans or taken to waste deposits with household chemical trash, thus

polluting soil. Here is a fatal social turnover of substance, not even mentioned by biologists or ecologists. After two centuries of such wash-offs will leave ground surface without a single flower or leaf. And, it is not everything. At first, I supposed that the consumed biological substance can be processed, and the problem will be either solved, or the solution will be simplified. But, as the world practice shows, it turns out that the humanity consumes about 1,5 billion tons of nutrition products during a year, and dumps about 30 billion tons of waste – approximately 20 times more, than consumed, outside the life film. Where do these wastes come from? It forms of a inconsiderate attitude towards biosphere nature and not understanding what the image of world and life actually is, although article “Silent crisis of planet”, by a well-known soil researcher of Russia draws attention of a reader to the silent exhaustion of soils as well as humus loss [21].

And, finally, let us refer to the lively organisms that do not fit into the technosphere cover of our new life. The humanity destroys them and takes out from life film in which they have been concentrated during the recent million years. Clear evidence to this fact is a rapid decrease in index of lively planet during the recent 4 decades (1970-2010) by 52%, more than two times. “Index of lively planet” reflects number of more than 10 thousand representative populations of mammals, birds, reptiles, amphibians, and fish. The greatest decrease is observed with fresh water kinds – by 76%. This index exceeds decrease temper for sea (39%) and land (39%) kinds. It would take one and a half of planet Earth to restore natural resources and services, consumed by humanity annually, as it is outlined in Report of WWF “Lively planet” (2014) [22, p. 45].

According to the mentioned data, we can make a number of conclusions that concern our topic. *One*: scientists and, therefore, elite of society don't have the whole knowledge on transition from life evolution on our planet which is one of the most serious reasons of not taking the right measures, required to save life. *Two*: education and mass media suffer from serious miscalculations without an idea on the tragedy scale. And though I have already made a notice on it in magazine “Socis” in 2005, [23], nothing has changed within educational system regarding this aspect, neither in schools, nor in universities or mass media.

So, what, in my opinion, should we do in the current conditions of change in evolution of life and death of biosphere? *First of all*, since biosphere is an integral whole, the humanity can end destruction of it and even begin to restore it at a new foundation, being self-decent and having the required will and resources. From this point all problems should be solved in UN, at the level of inter-state relations. So far we can observe not only competition for natural resources, but even wars between states. This union can take place if nuclear states are able create new solid conditions of life, based upon principles of social equality and real democracy in collaboration with a number of other large and developed countries. At the same time, a world

government should be created at the foundation of UN (not the existing blocks of countries), and radical changes should take place in the world. Among those the most important are: 1) disarmament of states and population with preservation of arms only in police structures for support of internal order; 2) fixing the current borders of countries with their political structures and democratic principles; 3) moving borders or uniting and dividing states only according to stated wish of local population under arbitrage of UN and the world government; 4) creation of armed non-nuclear forces, aimed to take urgent measures in case of unexpected situations, especially against threats of terror, extremism, theft, forced actions, etc. Many measures of life safety will be put in competence of UN and world government.

Secondly, modern science almost never study problems of biosphere and biosphere life, even so, it left the level on which it was in regard to activity of Roman club. In priority it serves economic and political elite, covering orders of private customers or countries. Such orders only scratch the surface of ecologic problems, but don't research problems of change in life evolution on our planet or transit towards life without biosphere and soil. Thus, it is necessary now to unite scientific effort of world nations to study the most urgent problems and make critical decisions at global and regional levels. In this case a special attention should be paid to problems of innovative nature, as nowadays such innovations are aimed to satisfy needs of pop-up market, whilst they should, first of all, search for ways to solve the most global problem – preserve biosphere and human in it. Science should also define an order of search for innovations that can take the world out of deep anthropogenic biosphere crisis. It is very dangerous to produce innovations that destroy biosphere nature and human. State and social activists, as well as population, must have a clear vision on the direction of world development and realize what actions are required now in order to save life. Of course, realization of objectives, set in Conferences of UN on environment and development is not replaced by a new knowledge, but, on the contrary, is enriched by it. However, even preliminary scientific-philosophic analysis shows us that the world must be reconstructed in its foundation, deny capitalism in its current form. The world science must give an answer to question “How can we build a new world?”

Thirdly, UN and world society must develop coordinated plans of organizing education and enlightenment at all levels of mass education on problems of world and life social-anthropogenic development, basic directions of preserving biosphere and reconstructing negative transformed and degraded parts of it, including human. These developments can be introduced to the course “Global problems of biosphere and biosphere life”. No doubt, it should also include ecologic programs that mostly reflect relations and interactions between lively organisms and their populations and their environment, including humanity as a component of the lively and subsystem of biosphere.

In conclusion I would like to add that shift in accent of research, as well as education, from ecologic problems to problems of change in life evolution on Earth presents objectives of scientific work in a different light. Even the very formulation of ecology speaks of change and improvement in interaction, cleaning the planet from waste, problems, mostly developed by ecologists. Nowadays they are blamed in all troubles, as if they did not pay enough attention to the existing problems in their emergence, and now the whole humanity should prepare for hard work, fuel their brain with deep knowledge and understanding of real world image, reconstruct the deeply transformed biosphere life, save everything, created by biosphere during the last 4 billion years. If we don't begin our work to save the planet today, there will be nothing to save tomorrow.

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