

Silent Change in Life Evolution on Earth and its Consequences

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Abstract: The researchers analyze the problems of changing the biosphere-biological evolution of life which existed about 4 billion years and at present it changes its direction under the influence of anthropogenic development of the society. Contemporary social philosophers and sociologists reflect by no means completely the picture of the society, human and life development which are more and more defined by scientific and technical progress, urbanization and techno-sphere of the earth. An essential methodological turning in the comprehension of life evolution changing was defined in V.I. Vernadsky's works. He noticed an increasing role of the mankind in biosphere development whereas before homo sapiens appearance this role belonged to living substance on the whole-microorganisms, plants and animals. He also mistakenly believed that instead of the biosphere noosphere will come under the influence of mind (science) and reasonable human labor. Now, we see a different picture: the mankind meets own growing need at the expense of not only natural resources of earlier biospheres but life-creating constituents of the present-day biosphere. Among them: living substance, top-soil, life film (hyperactive biostrome), biotic cycle of nutrients, definite parts of hydrosphere and atmosphere. They are in the organic life unity forming a living biosphere system. Reasoning from V.I. Vernadsky's works on the biosphere and noosphere the authors of the paper form their own methodology of investigations which they called socio-natural one that is pointing out to the change of biosphere nature by society. They explore a developing earth reality starting with the period of collecting economy to producing one and on this basis draw conclusions regarding the change of life evolution on our planet. In the study, they describe briefly the transient transformation forms of life which are determined already not by a self-developing biosphere not by an aggregate activity of its living organisms as it was before the formation and development of an anthropogenic social organism but by new life creating factors in their unity-by an anthropogenic society by a techno-sphere and biosphere nature. In these investigations the limitation of sociological theories has been overcome in which the society development is based on social regularities and biosphere nature is based on natural ones. The researchers put a question regarding the necessity of investigations of a fundamental change in the life evolution taking place on the earth. It is necessary to comprehend in which direction the evolution develops and what should be undertaken to save the full life of biosphere and humanity on the earth. The analysis shows that the society consisting of people develops now on the basis of the integration of social, anthropogenic (artificial) and natural processes. It creates technosphere as an inanimate artificial world substituting a natural cover of life. Not only humanity but also improved and even Genetically Modified (GM) living organisms are transferred into it from the biosphere. The society creating powerful scientific technical productive forces and resting upon science and high-powered engineering destroys biosphere and creates new life-post-biosphere one. With the loss of soil cover people will have to produce biological matter and living nature. In the study, the researchers substantiate the necessity of the deviation from the ideas of technocratic progress, practice of capitalist development having concentrated efforts on social economical and political reconstruction of the society and renaissance of biosphere life and natural biosphere conditions are still kept in abundance. They substantiate the necessity for the formation of potentialities for a stable socio-techno-biosphere form of life.

Key words: Biosphere nature, biosphere-biological evolution, new world picture, post-biosphere life, socio-techno-biological evolution, socio-techno-biological form of life, anthropogenic society, technosphere

INTRODUCTION

At present scientists are faced with the growing changes which occur on our planet both in social development and biosphere nature. They ask themselves a question in what direction the world and our life develop. But no textbook will give an answer what will be some centuries later, not to mention thousands years. Even such outstanding world predictors as I.V. Bestuzhev-Lada, a Russian forecaster and G. Kan, an American forecaster managed, in general with social forecasts leaving beyond the bounds of their investigations the fates of biosphere and biosphere of life in which a man is also a constituent. "Futurology is mentioned in 1983 in "Philosophical Encyclopedic Dictionary" (Lat. futurum-future and Greek-word, study), in the wide sense-aggregate of ideas of mankind future and in the narrow sense-field of scientific knowledge involving the prospects of social processes, often used as a synonym of forecasting and prognostics". But already in 1994 in "Concise Encyclopedia of Philosophy" published in post-Soviet Russia, futurology is considered in the wide sense as a "general concept of earth future and mankind, in the narrow sense-science of future".

If we consider earlier unscientific and scientific predictions starting with ancient Greek philosophers, then many of them imagined the future in the images of an ideal state (Plato) and later-in the images of an ideal social formation of the kind of socialism or communism (Utopian socialists, K. Marx, F. Engels, V.I. Lenin and other Marxists). The successes of monopoly capitalism (central, according to I. Wallerstein) as ideal and desired resulted in a wide advertising theory a post-industrial capitalist society (D. Bell). G. Kan declared such a socium hastily as a sample of a social structure in the course of the Great Transition (XIX-XXII century) from an agricultural society under the influence of the industrialization and scientific and technical revolution to a post-industrial one able to give the peoples of the planet a higher standard of development and quality of life (Kan, 1986).

An essential turn in the investigations of the future world starts with the Roman Club in 1968 which established as a main purpose the investigation of global problems, search of methods for the solution of common to all mankind problems overlooking the researches of global problems of the present as a basis of the world problem formation of human and biosphere life. Later the Club leaders hip paid attention to the attempts of J. Forrester, Prof. of Massachusetts Technological Institute with the aid of simulators and computer equipment to imitate the world process dynamics. A

profound analysis carried out by the club of only a number of essential processes connected with an exponential growth of industrial production, the increase of population on the planet, environment pollution, exhaustion of natural resources and worsening of food problem allowed not only attracting the attention to them but as mentioned E. Gartner, a German scientist, undermining the existing and supported images of the "flourishing society" and "post-industrial society" as a future of the planet (Gartner, 1976).

Being based in many respects on the investigations of the Roman Club, the UNO Convention on Environment and Development in Rio de Janeiro in 1992 proclaimed a perspective course for the stable development of mankind and its environment which turned out to be extremely unreasoned, particularly in terms of vagueness of the concept of environment. As a matter of fact the humanity is a part of this "environment". The science has elaborated more concrete ideas: "biosphere" and "humanity" as a subsystem of biosphere together with other subsystems with which mankind interacts. At the same time, the basic subsystems are not determined clearly by science and the mankind itself is not "bare" like animals but supplied with technosphere as an inanimate artificial subject-substantial and field (electro-magnetic) existence. This existence, in its turn, cannot be separated from people, it dictate new regularities of development of not only biosphere and a man in it but joint regularities of the development of a newly brought world and life in it.

What sort of subsystems can we emphasize starting from many scientific discoveries? This is living substance, soil cover, life membrane (biostrome), biological cycle of matter, definite parts of hydrosphere and atmosphere. But living substance itself consists of people, animals, plants and microorganisms. People having been evolved from living substance formed now a self-dependent branched social subsystem having formed a many-sided culture-material and spiritual with the own regularities and specific branches. Certainly, it is rather difficult to carry out an analysis of interactions of mankind with other parts of biosphere, particularly in terms of environment which surrounds a man. The simplest way for such sort of an analysis was for scientists in the form of global ecology. At the same time in comparison with the Conference Stockholm-72 where an accent was made on nature protective problems in Rio the matter concerned the prevention of ecological catastrophe. And the concepts themselves of an ecological crisis and ecological catastrophe theoretically are rather uncertain and hence, real measures for the prevention of such a catastrophe are far from its completeness from that picture being formed now in the present-day world. It is evident already at the

analysis of the proceedings of the Conf. Rio-2012 which restricted itself to the addition of only “green economy” development. But if we consider world events seriously they have a deplorable global picture: biosphere of the earth destroys actively with the destruction, first of all, of its own basis-living biosphere substance, soil cover, life membrane (biostrome) and a natural biotic cycle of matter.

At the same time this process is accompanied already by the formation of new life elements which are still out of field of vision of philosophy and science, world political, social-economical and professional elite. This is the formation of improved animals and ameliorated plants with their transition from biosphere life conditions into technosphere, artificial ones or basically anthropogenic. Domesticated animals are transferred into technosphere conditions with the use of still natural plant world and also already cultivated plants grown on ameliorated technogenic soils. In confirmation of this it is possible to give such data. A technogenic transition began 10 thousand years ago in the Neolithic period, agricultural revolutions when mankind on the planet began to pass from collecting economy (household) to the first producing one-agriculture in combination with handicraft. Just then began its formation the first stage of planet technosphering which then was supplemented about 7 thousand years ago with urban settlements with the concentration of management functions in them, commerce and handicraft. In the course of 10 years up to 1860 to the technosphere-artificial conditions of life passed altogether on its biomass 5% ground animals of the planet including also a man. In 1940, they made already 10%, in 1980-20%, now-about 40% of biomass of ground animals (Poteyev, 1999). Now, already according the expert estimate about one third of all flora by biomass on land is produced by domesticated kinds of plants located actually on cultivated ameliorated soil fields. At the same time, 55% of planet land is presented by anthropogenic soils, actually rootless. All this speaks not so much about global ecological problems which are emphasized in all documents of UNO Conferences on environment and development as about the transition of life evolution on our planet.

Nodoubt, it still requires a careful study which one of the authors of the paper E.S. Demidenko insisted on in his letter to the Russian Academy of Sciences in 2011. In their response, the RAS experts from among philosophers and scientists gathered at the Institute of Philosophy of RAS offered to hold a scientific conference attracting the institutes of RAS to be engaged seriously with the problem revealed. This letter to RAS was signed by Academician A.A. Guseinov, director of the Institute of Philosophy and a letter to the author by RAS of

23.04.2012 No. D-987 by Vice-President A.D. Nekipelov. But these recommendations were not taken into account by a new leadership. In 2014 on the initiative of the author and with the support of Academician Yu.S. Pivovarov, director INION RAS there were held two closed scientific conferences of experts only with the agenda “Anthropogenic-technogenic biosphere degradation: is there any way out from crisis?” which confirmed that such a way out can be found but it is necessary to seek it actively having offered also corresponding measures. In spite of that V.V. Ivanov, Vice-President of RAS was at the conferences and even made a report there was no any reaction from the leadership even at the offers of the participants of two conferences of RAS. Therefore now the authors raise this problem in the paper as the situation for the whole world and life is extremely critical requiring a profound analysis of all institutes of RAS.

Target setting: In connection with the situation arisen on our planet in the field of biosphere degradation and growing development of new life forms the authors put a question regarding a possible radical change of life evolution on our planet, where such an evolution leads us and what should be undertaken to proceed with a safety life of biosphere and mankind. Such a question was arisen for the first time by V.I. Vernadsky at the comprehension of the role of living substance-microorganisms, plants and animals-in the development of the whole surface of our planet a human role in the world change with human appearance in biosphere. If living substance in the course of the entire history of its existence and development was transforming the planet surface and now mankind performs it more “successfully”. At the same time, he uses a term “noosphere” which was introduced in a scientific circulation by E. Leroy, a French mathematician and anthropologist in 1927 after making an acquaintance with V.I. Vernadsky’s works who gave the concept “noosphere” in contrast to the author’s idealistic one, a materialistic content.

“Biosphere passed not once into a new evolutionary state, pointed out also Vernadsky himself. We experience it also now, over the last 10-20 thousand years when a man, having elaborated a scientific thought in social environment, creates in biosphere a new geological force unusual in it. Biosphere passed or, to be more exact, passes into a new evolutionary state-noosphere is processed by a scientific thought of a social man” (Vernadsky, 1991). In his last life time publication “Some words of Noosphere” (1944) he writes: “Mankind, taken as a whole, becomes a powerful geological force. And to him, to his thought and work there is put a question of biosphere transformation in the interests of freely thinking

mankind as a whole. This new state of biosphere which we are approaching to without noticing it is noosphere. When he puts a question of biosphere transformation in the interests of a man and on this basis the noosphere formation then the idea itself is particularly anthropocentric leading to the transformation of self-developing biosphere nature without comprehension of deep consequences of such scaled effects.

Indeed, agricultural mankind was occupied already with plant cultivation and animal domestication but no one arrived at an idea regarding a possibility of interference into natural biosphere processes and consequences of such a boundless interference. And if a theoretical substantiation of possible consequences occurs now and a co-evolution of social and natural development, their stability is popularized, then practice is far from such a declaration. Therefore, the task is set by the authors not to become us like parrots but reveal deep processes which are leading now, in spite of all good “scientifically adjusted” theories and solutions, not only to the instability of development and biosphere and mankind but also to the destruction of biosphere life itself in the centuries.

MATERIALS AND METHODS

Investigation: For the investigation of the phenomenon of life evolution change on the planet the authors needed also the search of corresponding methodology of investigations. It is not simple for philosophers and scientists but only because of the reason that it is not looked for in as much as these problems are not thought about. The problem is that there are about 500 sciences in the world besides also 15,000 scientific disciplines as a result of which all scientists are in the branches of science isolated from each other. The problem was set regarding the formation of a certain connecting-link between sciences that it could be possible to overcome such isolation in the world. But will the uniting all scientist science appeared solve the problem of scientific insularity overcoming? Even if it could overcome, then in the world there is another cognitive problem-negotiation of a certain abyss between scientific and non-scientific knowledge. Who on earth will solve them?

Most likely, the insularity negotiation between different level of knowledge, social experience and social-cultural values elaborated by mankind must rest upon philosophy which in due time gave rise to and set up different sciences and in such a way enriched human experience of vital activity raising a civilization level of mankind. Now philosophy will have to “gather stones scattered”, for which hit is not ready limiting itself with the analysis of the world, interconnections of man with society and the world.

Now when the philosophy determined itself as a science called, already without support on sciences, determine independently universal laws of world and life development and also truth retrieval, a deeper level of universal knowledge a question is put inevitably by us, what for are all sciences, if it is only one philosophy “knows everything about the world”. Philosophy, in our opinion, must rely not only upon scientific knowledge but at the same time together with sciences determine knowledge of the world, of the direction of world and life development, what sort of the motion direction they defined. Philosophy must inevitably participate not only in inter-discipline investigations but also lead these investigations. Created by one of the authors E. Demidenko in Bryansk State Technical University a scientific-philosophical school for investigations of socio-techno-natural processes and social anthropogenic development of the world is a striking example of this. Unifying philosophers, scientists of different fields and post graduate students it carried out a number of scientific-philosophical investigations which allowed obtaining for the first time new knowledge of the world and life the matter of this problem will be considered further.

The second aspect in search of the methodology for investigations of life evolution change on the earth one should mention the discoveries of new phenomena in the development of life on the planet made by V.I. Vernadsky, the outstanding scientist and philosopher. It found its reflection in the creation by him the concept of biosphere in 1926 and in the attempt of the foresight the biosphere formation of a higher level-noosphere as a sphere of intellect effect upon the world on the basis of collective human intellect (science) and determined by intellect and new productive forces of labour.

Only at the beginning of the XXth century, it becomes clear, though by no means in everything that with the advent of man on the earth a new stage in the development of biosphere began. In 1922, Academician A.P. Pavlov calls such a stage as anthropogenic. V.I. Vernadsky came to the comprehension of that after the mighty transformations of the planet surface by living organisms the transformations of it only by one living being broken loose from nature captivity-a man. Relying upon Vernadsky’s ideas about human growing and transforming power E. Leroy comes to a conclusion that under mankind influence and human intellect a biosphere passes into its new state-noosphere. At the same time, he pays attention to two the most significant events on the planet in the course of all its history: first emergence of life, the transformation of inanimate life into the living one that is vitalism of matter; second-hominization of life

developed by its sentient being. In the same period, Pierre Teilhard de Chardin, a French Catholic priest and anthropologist, supporting Vernadsky's investigations and E. Leroy, his colleague pays attention to that noospherization of the earth is accompanied with the "overflow of fields, cornfields, factories and works" and emphasizes one more peculiarity of this process-artificial takes the place of natural.

In the upshot all these facts which were noticed by prominent scientists who are called patriarchs of noosphere give quite a number of interesting observations of biosphere nature which, at first glance, contradict each other and on the basis of which it is possible not immediately to predict a development vector of the earth planet. Forming up well-known preconditions which give a certain methodological material and the facts for the theoretical thoughts the researchers of the paper carry out the further investigations of a quiet transition of life evolution on the earth.

RESULTS AND DISCUSSION

Theoretical thoughts: Reasoning from the available knowledge of the world we can trace some most significant trends in the mankind development in the correlation with self-developing biosphere. If Cro-Magnon man appeared about 200 thousand years ago, then for a long period of time he was living in nature like an animal but really and already as more intelligent, than his ancestry and surrounding animals, used implements made by him and invented techniques for the use of products of biosphere nature and animal catching. And only about 10 thousand years ago a man passes from collecting and hunting to agriculture mastering. And here the reduction of large animals and the necessity of soil cultivation to grow food stuffs which a man learnt to cultivate for himself and for fodder of domesticated animals for various needs played the own role. From agriculture begins the mankind transition from collecting economy to producing one which causes already a more acute problem for biosphere and biosphere life, than large animal decrease. The matter concerns the basis of biosphere life on land that is a top-soil which was forming on the planet in the course of over 400 million years, from the time of life leaving from hydrosphere on the surface of lithosphere. This already global process of a top-soil destruction increased its scale from century to century owing to many reasons: population growth, reduction of primeval nature and fertile land, limitation of soil land in the areas with favorable climate and so on.

V.I. Vernadsky paid attention to the role of all living substance in the transformation of the planet surface but here a decisive role is played by soils with its humus, ancient organic fertilizer, certain sediments in the course of the renaissance process annually of perennial plants and their mineral deposits during millennial soil mineralization under a turfy cover of perennial grass. Soils were destructed at higher rates than their mineralization took place. It is brought out clearly by statistic data collected now by researchers in the course of a long period of time of their operation and simply destruction without of knowledge of their role in biosphere development and life conservation on the planet. Biosphere fertile soils during late Stone Age decreased by 2 billion ha, including that in the course of last three centuries of industrial development by 0.7 billion ha. Now in agriculture there are 1.5 billion ha of soils (Stroganova, 2006), further more with two-thirds destroyed. It will be sufficient for a younger generation only for 150 years and 1 billion ha of reserve soils, according to the computations of A.S. Yakovlev, Prof. of MSU-only for 30-40 years. That is within the bounds of 200 years the planet land will be without biosphere soil with barren land.

Such an outlook is completely possible in as much as on the planet land there is 55% of anthro-technogenic soils. Academician G.V. Dobrovolsky of AS of the USSR and RAS, D.Sc. and a well-known soil scientist, creator of the faculty of soil science of MSU in his paper "Planet Quiet Crisis" has shown clearly how imperceptibly for man disappear the soil as a result of not only its forced operation but because of a common unreasoned work on it. So, "because of American prairie uncontrolled ploughing up there was destroyed arable soil on the area of about 40 million ha of which over 20 million ha became actually unsuitable for the further tillage. This case was declared national disaster. F. Roosevelt claimed that "people that destroys its soil destroys itself" (Dobrovolskii, 1997). He does not give a forecast within the bounds of what time the planet will stay without soil but as the authors of the paper mentioned above have shown the disaster is around the corner. The authors included in the current statistics not only the period of agricultural epoch of common agriculture existence in the course of 10 thousand years but also a period of industrial epoch which began on the boundary of 18 to 19 centuries as a result of the industrialization and then followed urbanization and active technospherization of the earth planet.

What kind of productive forces appear in that period of time which then blew up radically a “slow agricultural epoch”? If we appeal to agricultural productive forces then they can be characterized as natural-biological. If at the dawn of agriculture man carried out all works himself, then in 1800 when the industrial urban epoch began actively to get on its feet a farmer performed only 30% of agricultural works, while to the share of animals fell about 68% of works. The computations have shown that by the middle of the XX-th century to the share of social technical energy fell about 96% whereas in 1800 only 2% (Arab-Ogly, 1986). If we consider present-day scientific technical productive forces then to their share falls about 98-99% whereas to the share of man and animals approximately 1-2% of all works carried out in the world, though about half of the population of the planet is engaged mainly with manual labour. It is such a stupendous ascent of productive forces that actually they turn not only the surface of the planet but also the whole of the image and spirit of human vital activity destructing not only biosphere nature but even a man himself that will be revealed somewhat below.

But a new trend in the development of the world and life became formed more and more not by ancient self-development of biosphere nature but by “collective intellect” of the whole mankind and now-its sciences which specially creates science-technics, techniques and productive forces of “nature conquest” predominantly not for the sake of mankind but for the sake of a small number of the richest people of the present-day world which consists of economical, political and professional elite. It is, as a matter of fact, a new mega-trend of socio-techno-natural development starting with the late Stone Age: society changes profoundly the planet nature but at the same time biosphere does not pass into noosphere but degrades. Finally, social-technological and anthropogenic development of the world proceeds along the path of the formation of the most complex global technosphere in the form of the largest cities and urban agglomerations, production, various kinds of structures, technics and techniques, transport systems and so on at the expense of biosphere resources (Demidenko and Dergacheva, 2016).

Technosphere genesis is referred to the Neolithic revolution X-VIII thousand B.C. which finished the “era of brutal human life” and allowed him as emphasized N.N. Moiseyev, a Russian scientist, “to reconstruct qualitatively the nature itself of nature”. This reconstruction touched not only the formation of artificial techniques with the production of means of life but also, according to L. Mamford, a German scientist, a man engaged in plant improvement “for the first time began

transforming wittingly the face of the earth”. Though about consciousness hardly could it be possible to speak now as he had to do this satisfying his needs and saving his life but without understanding the regularities of the development of life, biosphere and mankind. The transition to the agriculture is not limited with the “Earth face”. According to N.N. Moiseyev with the application of minerals man started “creating artificial biogeochemical cycles involving into a circulation substances which were alien to natural biogeochemical cycles to present day” (Moiseyev, 1999) destroying thereby biosphere itself. And he so emphasizes justly: man has found not simply a new ecological niche but has created it not only reformed his own way of life activity but also organized a considerable artificial or social circulation of substances (Moiseyev, 1999).

To feel how quickly the world changes tearing itself away from a common agricultural epoch it is enough to present data on the growth of urban population of the planet. The urbanization boundary was determined by E. Demidenko still in the 1970 in the course of his work on Ph.D. thesis and a monograph “Demographic problems and city outlooks”. If towns began to develop about 7000 years ago, then the urbanization process itself can be referred to the period of the industrial revolution exploring from this milestone (1800) a rapid growth of urban population and technosphere into which the population is included arranging it self accordingly with the system of technosphere objects. According to the authors’ computations, in 1800 there were only 45 million town-dwellers (5.1%), in 2015 they were 3.7 billion (51%) that is during this period all population of the planet increased 8 times (from 910 mln. upto 7.3 bln.) and urban one-80 times. When we consider the growth of technosphere on its mass then it increased many thousand times per each person and became comparable with the decreased living substance of the planet. Here, it is time to recollect data of migrants-the presence of 40% ground animals according their mass including also people living in technosphere out of biosphere spaces. A rapid growth of technosphere and artificial world on the whole on the one hand and the degradation of biosphere with destructions dangerous for mankind on the other hand as it was emphasized above, resulted in now a biotic cycle of useful substances to the strongest transformation and accordingly biosphere life, put it on the brink of the destruction in some centuries.

It is promoted also by a noticeable increasing destruction of a biosphere-biotic cycle of matters with the substitution by anthropo-technogenic (social-technogenic). At the same time, about huge losses of biosphere organic fertilizer speak the facts of its fault in

pits, seas and oceans. According to data of V.A. Kovda, an outstanding soil scientist, in the interior of the planet there is accumulated about 2.4 trillion tons of humus at that in 20s of the XX-th century, there was washed away it 3 mln. Tons annually in seas and oceans, in 70s-24 mln. (Kovda, 1987), now-over 30 mln. that requires urgent measure taking for its loss stopping. This already artificial cycle of organic fertilizer has taken a fatal character. Now in the world there are 51% of townsmen and foodstuff removal from village to town makes half of it. Besides, about two thirds of sea produce processed by fish industry is delivered to town. After their application a biosphere biological matter is thrown down from sewerage systems in seas and oceans and from kitchens it is thrown down in dumps together with dangerous chemical agents. At best it is burnt but it is not returned in to soil for biosphere life reproduction. At sea burial together with “chemistry” are also polluted coastal waters from where the population takes sea products and vegetable food of low-quality or even dangerous for life and health. More than this, recently in the coastal waters of seas one breeds also farm fish. The British agency for food standards, emphasizes the newspaper “The World of News” was accused more than once of collusion with the producers of salmon. It dissembled in their fish poison matter causing cancer, diabetes and defects in new-born children, the most dangerous fish was recognized that delivered from Norwegian farms. A gene mutation was revealed in 50% of newly-hatched fish. It is the most poisonous fish in the world. One has to create fish literally with the aid of various chemical agents and nutritional additives.

The socio-techno-natural progress is the total of the development in the world of uncontrolled scientific-technical progress on the basis of science and machine giving a possibility for the formation and integrated global technosphere and saturation of the biosphere biological matter with artificial and dangerous substances and even chemical poisonous substances. A strong integration of social, anthropogenic and biosphere-natural processes creating other regularities of the terrestrial world development and up till now neither philosophy nor science in Russia and abroad do not study them in full measure. This false progress hypnotizes human consciousness transforms human intellect and even science creating social technocratic consciousness leading to the destruction of both biosphere and a biosphere man. A convincing proof of this is the reduction of a living planet index during the last four decades (1970-2010) by 52%, more than twice. A “Living planet index” reflects a magnitude

of >10,000 representative populations of mammals, birds, reptiles, amphibian and fish. The magnitude of the populations of freshwater kinds decreased most considerably-by 76%. This exceeds considerably the rates of reduction for marine kinds (39%) and terrestrial ones (39%). For the natural resources recovery and services which we use every year, as it is emphasized in the Report of World Wild Fond (WWF) “Living Planet” (2014), it would require one and a half of the earth planet (Babenko, 2014).

About the beginning of the life transition on the planet vividly shows also a global human transformation in proportion as human civilization development grows. For the first time about this matter one of the authors E.Demidenko has made a report in 1993 at the World Philosophical Congress in Moscow. The matter concerned the transformation of qualities of two kinds: a contradictory development of social and considerable destruction of natural-biological and psychical qualities which became apparent strongly in the increase of a number of “civilization diseases”, in the decrease of human life quality, particularly of children because of the decrease of a planet ecological state. According to WHO data up to 90% of death-rate in the developed countries accounts for cardio-vascular and new oncological diseases where as in the developing countries for the time being the death-rate of these diseases is less than a half (Khaskin *et al.*, 2008). If in agricultural-biosphere socium the children died (in Russia in the late XIXth century 43% up to 5 years), then now already in the developed countries 98% of children survive and have an opportunity to have posterity. On average 7% of modern people have a hereditary genetic burden where as in the countries of Western Europe-more than one fifth of all individuals (Khaskin *et al.*, 2008).

The basic reasons of disease increase and destruction of the mankind gene pool are the destruction of an ecological niche of people vital activity, their transition to technosphere-urban living conditions, environment pollution, the exhaustion of the soil and deficient nutrition of people and so on. The mega-trends mentioned by me form the basis of current socio-techno-natural globalization, its global processes and problems which cannot but tell on life activities and health of modern man” (Dergacheva, 2016). Science, in its turn, contributed its share to the process of the degradation. Technosphere using achievements of techno-science, initiates global changes of the kind of *Homo sapiens* in the interrelation with artificial processes. It promotes finally ananthropogenic creature formation (Dergacheva, 2016). At present time, they write most often

about transformations of biological human properties initiated by scientific discoveries missing transformation ones under the influence of the social-anthropogenic development of the planet earth.

Results of theoretical reasoning: In what way does the evolution of life change with the appearance and development of home sapiens on earth? In the first place, the appearance of an intelligent animal capable with its developing intellect and accordingly physically, by hand in an organized way influence upon biosphere environment resulted in the appearance of social-biosphere elements of life evolution which were not dangerous for biosphere in view of minor quantity of the population and its total impact upon biosphere nature. Secondly, the mankind continued to develop with a slight difference from highly developed animals in the course of many millennia. If Cro-Magnon man appeared, according to geneticists' data 200 thousand years ago, then about 190 thousand years he was in a certain harmony with environment reducing the livestock population (cattle, middle animals) in a number of regions favorable for life.

Considerable changes began in biosphere with the transition of society to agricultural producing economy when man passes to agriculture and begins to form biological productive forces with the aid of which affects biosphere. A life model under formation can be referred to a social-biospheric model of life, but representing with itself the reduction of biosphere areas of a special kind-the reduction of biosphere vegetable life and top-soil in the regions of inhabitancy. This model of life embraces about 10 thousand years. The mankind uses still mainly developed biosphere technologies at plant cultivation and at the domestication of some animals for the satisfaction of human needs. At the same time, a disharmony became evident between society and biosphere as an increasing process of soil destruction and biosphere nature transformation becomes stronger and stronger. An accelerating development of the society is carried out at the expense of biosphere resources including the most significant life forming ones. At the same time in the agricultural era, new elements of the socio-techno-biosphere pattern of life begin to appear at the expense of the application of means of production in agriculture and handicraft industry which is consolidated mainly in the form of an urban way of life.

During the industrial revolution of the late XVIII-XIXth centuries the processes of industrialization and urbanization develop rapidly as a result of which the technosphere increases in size and the transition in it of not only a man but also a considerable part of animals and cultivated plants. Biosphere as an integrated

self-developing system of biological life including also a man, begins not only to change its structure but also degrade and lose its former reproductive capacities for terrestrial life. Nevertheless during the first two centuries, a short-term socio-techno-biosphere pattern of life arises and at the turn of XX-XXI centuries with the destruction of more than a half of living organism populations which was mentioned earlier, a dangerous post-biosphere or socio-techno-biological system of life begins its rapid and dangerous development.

That is, the functions of reproduction and creation of a new system of life occurs under conditions of a disappearing biosphere when the society takes upon itself completely the development of life without comprehension of that what this society has done. This already takes place to a great extent but people cherish hopes for certain innovation achievements in the field of life conservation without biosphere. Indeed, a "creative socium" creates a variety of organisms on the surface of lithosphere-improves in former time tame ones, creates biotechnological, genetically modified, transgenic, anthropogenic-transformed organisms (of a kind of fishpond salmons) and so on. Further: biosphere organisms are saturated intensively with artificial and inadmissible for life chemical agents that results in pathological changes and death that now it does not avoid also a man. This is a mass way out of mankind beyond biosphere and former biosphere biogeochemical processes forgetting that without this the atmosphere created by biosphere is lost forever without which all living organisms can exist only in isolated from outer space areas of technosphere with the artificial atmosphere. And with the own way of life and all our structure of life activity we create on the earth "new cosmos" about which said N.A. Berdyayev but indeed, putting other sense the creating of things which do not exist in cosmos now. This is, finally asocio-techno-biological system of life created by mankind which can be transformed even in to a post-biological system of life which we do not know for the time being but guess it on the basis of the creation of computers.

Summary of consequences of life evolution change: If we try to summarize worldwide trends on the basis of the analysis of life evolution change on the earth, then we would mention the most critical really fatal ones for the world community and biosphere: society changes technocratically the nature of the planet as a result of which takes place a rapid destruction of biosphere, its biostrome, life covering including a basic mass of living substance in forests and economic areas of oceans and seas, biogenic substance in top-soil composing a basis of

biosphere life; active formation of a global technosphere as a base of current social development and a planetary life covering with nature formed by biosphere; historical change of life evolution on the earth planet: from biosphere-biological to socio-techno-biological as a matter of fact without biosphere self-developing milliards years; global earth dweller transformation in the direction of their integration with artificial nature environment, formation of a new unity-a global socio-techno-natural one; a considerable transformational human change as a biosocial organism in the direction of socio-techno-biological with the outlook of the formation from the born biological organism a cybernetic one on the basis of its constant medical and social transformation.

CONCLUSION

In the study, the researchers substantiate the change of life evolution from present biosphere to post-biosphere one and draw a conclusion regarding consequences of such a change. They pay attention to that modern philosophy and science are “hypnotized” so far with ecological problems which itself submits to the processes of the other transition of life in comparison with existed ones in biosphere. We cannot say that the recommendations of science and Conferences of the UNO on the solution of ecological problems are wrong they should be used but they are insufficient and they will not result in effect desired for mankind and biosphere life in view of so far the falseness of the directions in scientific investigations in the world. They offer the most probable, in their opinion, safe and promising scenario of withdrawal from a mortal danger for man and biosphere and this danger comes from the world social-anthropogenic development spontaneously chosen by mankind.

The following ideas provide a basis: the organization of the conservation of the remainder of biosphere-biological substance existing on the planet (which was being formed by means of self-development on land for about 400 million years) at the expense of the world reconstruction of the matter social-anthropogenic biotic cycle developed by mankind and dangerous for life; the partial restoration of many biosphere areas particularly in the regions with favorable climatic conditions and active processes of self-development; the formation of favorable conditions for good health and successful vital activity of people and their humane development at the expense of: the conservation and increase of biosphere and full value of biological matter in the top-soil; the formation of such a matter in the vermin technological fields and biotechnological production in town and

suburbia; the formation of large-scale processing of biological waste both of agricultural production and industrial one and other branches of industry and human activity; the discontinuance of any other dangerous pollutions for biosphere organisms: human, vegetable, animal and microorganisms; the overcoming of technocratic spirits and thought in elite and power cycles of society; active constraint in the formation of technosphere, particularly of its low-quality forms polluting biosphere and man; 8) the urgent discontinuance of production of the most dangerous technosphere objects-artificial xenobiotics and dangerous means of E-field radiations and for allowable to production dubious ones the quality and utility certification should be more strict; the transition to pure power sources and power maximum savings; the introduction of “green economy” justified forms; the discontinuance of low-quality industrial product manufacturing particularly that detrimental to human organism and produced for the sake of fashion; the discontinuance of low-quality foodstuff dangerous for man and animals; the solution of many problems concerning climate changes on the planet; the rationalization of all kinds of vital activity on the basis of social equality, humanism, labour contribution of a man and a family to the life welfare creation, conservation of life and its development; a corresponding social and humanistic realization of state and political systems.

Naturally, the matter concerns first of all a number of strategic fundamental ideas on the basis of which there will be consciously created a promising socio-techno-biosphere pattern of life that is with the conservation of terrestrial self-developing biosphere nature and its compatibility with the world artificial and rationally formed on the biosphere base but not on a technosphere-artificial. Biosphere is a planetary unity but present-day mankind fragmented by state borders proceeds from their many-sided interests and needs which are solved at the expense biosphere nature without relying on society earth and biosphere sciences. From this, it follows that the UNO, first of all, should solve the problem of peoples integration against the threat of life destruction and should elaborate a certain policy for their integration relying on the experience of hardship negotiation connected with the Second World War and solution of other world problems.

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