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**SOCIOTHECHNONATURAL GLOBALIZATION: CONSEQUENCES FOR SOCIETY,
NATURE. AND HUMANITY**

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Modern globalization is considered as a process of sociotechnonatural development that embraces social-economic, anthropo-social, natural-biological, and technospheric changes into a united system. Liberal-economic society that creates technosphere and transforms biosphere, takes the greatest part in these processes. The danger of sociotechnonatural development lies in rash improvement of nature by society with artificial technology, and this act defines the necessity of a comprehensive research in the area of transformation processes and planning programmes of stable social-natural development.

Key words: sociotechnonatural globalization, biosphere, technosphere, anthropogenic (industrial and postindustrial society) society.

Globalization is a process of universalizing, reinforcing relations and dependence between countries and nations of the world in different areas of social life, forming a single global society that will initially embrace nations of independent states. It is also explained as a process of growth in integrity of the world system that undergoes in direction of connecting heterogeneous systems that function upon principles of a single world order. However, this process cannot be equalized with globalization, neglecting its evolutionary and transitional essence in life of planet Earth. Underlining social-economic nature of globalization as the defining factor, most researchers explain this process not deeply enough or in a single-sided fashion, though all of them acknowledge the new qualitative condition of human society.

Process of globalization is not narrowed down to changes in social-economic areas of life in society. This process includes not only society and people, but also nature, within which they all exist. Society develops in nature (biosphere) and is related with it by their metabolic processes – natural and social-anthropogenic processes, thus, phenomenon of globalization must be studied as a process of social-anthropogenic, in other words, integrated socialtechnonatural development of the world [6].

Modern globalizing world society unites in planetary scale not only in technical-economic success, but also in much more significant social-natural processes and problems. The developed

countries transit their polluting production to outdated regions and thus aggravate their poor social-natural condition. However, it does not free Western countries from solving ecological problems as at planet Earth all countries are related in united space, and consequence of local natural crisis have their effect in global scale. Rapidly globalized and anthropogenically-socializing world should be studied in organic relation with biosphere, as balance in natural environment and social system defines life prosperity of Earth population and perspective of further existence of humanity [1].

Evolution of anthropogenic social system mostly happens through united effort of science, technics, technology, production, and the artificial environment, created by them – technosphere. The latter (technosphere) is mostly concentrated in urban settlements. And though in early XXI century more than half of world population lives in cities, urbanization should not be associated strictly with growth of small, medium, and large cities (including megapolis) and their agglomeration, increase in their population. It is a more complicated process that affects cities and suburban areas as well as countryside, thus defining its qualitative transformations – urbanization, anthropogenic transformation of suburban areas and villages [2].

We can argue the claim that anthropogenic development has a destructive effect upon natural systems. As an example we can show experience of the developed countries that design and implement projects of ecological improvement of urbanized settlements (so-called ecopolis), surrounded by trees and pods, enlarge areas of natural reserves. But, in reality almost no natural ecosystems, not affected by anthropogenic activity remained even in these countries, as they are exposed to qualitative anthropogenic transformations, directed into depths and widths of natural landscape, and it decreased their productivity drastically. Thus, 95% of initial forest massifs are destroyed in USA, and none of them remained in Europe. Restored secondary forests are poor in nutritional substance and specific variety, grow slowly, and produce low-quality wood [3].

Nowadays development and introduction of ecologically-clean technologies is studied as a basic factor in solving problems of preserving nature in developed countries due to the disturbed ecological balance. Using mostly directive instruments of state policy, these countries reconstruct their production, increasing the part of ecologic sectors and realizing concept of “ecological” economy, essence of which lies in developing market that does not damage natural environment. These actions demonstrate creation of system of ecological regulation.

At the same time evolution of modern anthropogenic (industrial and postindustrial) society goes on with growing interaction between technosphere and social-natural systems. Artificial, urbanized infrastructure of technosphere, filled with myriads of informational-communicational networks of transport and connection, becomes a natural element of providing vital functions for the developing society. Thus, objects and elements of technosphere create system changes in society

and nature that, when taken together, result in phenomenon of anthropogenic nature of social and natural development and broaden this type of development throughout the world. At the same time, technosphere gives significant and growing acceleration not only to social, but social-natural processes, aggravates global problems, created by them. Universalizing technosphere participates in metabolic processes between biosphere and sociosphere, thus becoming a component of globalization processes. All these aspects prove the fact that globalization exists as a process of system-integrated sociotechnonatural development.

An active transformation of natural biological systems, development and further distribution of transgenic life organisms takes place in early XXI century. In global scale transnational corporations (TNC, as their major developers) transit towards commercial facilitation of bio- and nanotechnologies. Thus, economic elite of society begins to broaden anthropogenicity in forms of biological life creation. The globalizing anthropogenic societies involve agrarian societies that are technologically-dependent upon the developed world, into anthropogenic business and construction of technosphere. Being remote from “central” capitalism, such countries are forced to reproduce industrial-anthropogenic model of development, dictated by global “players” of business, as this participation defines their temporary social-economic prosperity. Thus basis of globalization is created – it is an anthropogenic organism that transforms qualitatively into nature [4].

Modern globalization corresponds to anthropogenic stage of social development and improvement of nature. At the foundation of purposeful broadening of various elements of the artificial – from synthesized substances, including food products, to electromagnetic fields the globalizing anthropogenic society reconstruct the very social organism (including a person), former system of developing nature and its life that existed on Earth for 4 billion years. Artificial substances (xenobiotics, supertoxicants) are introduced to biosphere biotic turnover of substance through nutritional chains and transform it, disturb its circulation, spread everywhere, as a result, local anthropogenic biochemical processes become global. These quantitatively-different from biosphere technological processes integrate with natural organisms and human, thus creating intermediate forms of life between natural and artificial world – technobiosphere, anthropogenic person (with weakened health, their vital functions are maintained by artificial technology) [5], transgenic plants, cloned animals, and in global scale – technobiogeochemical turnovers of substance, energy, and information.

In totality modern global processes and problems form a phenomenon of sociotechnonatural globalization that must be studied thoroughly in order to plan certain programmes of stable social-natural development [7] and long-term development of Russia as a country that still preserves a part of its natural potential.

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