# Society 5.0: a Self-Devouring System

**Rafail Asgatovich Nurullin**

*Abstract. The subject matter of the paper is a philosophical analysis of the civilization-cultural development strategy Society 5.0. The strategy emerged from the idea of the Japanese government formulated in 2016. A critical analysis shows that this development program contains systemic contradictions and risks. Nevertheless, the idea seems to be achieving the goals of modern humanism in the conditions of information civilization development. The research methodology stems from the principles of consistency, complementarity, fractality and the dialectics of the concepts which are as follows: culture and civilization, linear and nonlinear development, etc. There is much evidence that today the integration of mankind has become global. The process leads to, firstly, the changes in the scales of human subjectivity, and secondly, the attitude of man to chance and need. All these characteristics are fraught with threats to the holistic existence of mankind, and the possibility of people's coming out of the crisis to the new levels of development. Private culture, which previously served as a powerful integrator of society, is losing the opportunity to carry out an ideological, and as a result, educational function in the conditions of an informational civilization. The transition of humanity from the monocultural to the multicultural way requires of relations between culture and civilization being based on the principles of complementarity. The construction of humanity as a self-organizing system is possible only through the management of civilization processes through culture, i.e., through the spiritual improvement of the human person. Evidence suggests that the principles laid down in the Society 5.0 development program do not meet these requirements. The program aims to implement the principle of positive feedback, as it tries to solve global problems of civilization with civilization practices. Theoretically, the achievement of harmonious relations between civilization and culture becomes possible on condition of the principle of complementarity. However, this principle also implies the rule of negative feedback.*

*Keywords: Society 5.0, system, man, society, culture, civilization, humanism, synergetics, feedback.*

## I. INTRODUCTION

The supersmart civilization-cultural developmental strategy Society 5.0 based on the use of digital technologies in all spheres of life was adopted by the Japanese government in 2016. The main idea of the strategy is to solve social problems by integrating the digital environment and the physical space and, as a result, improve the quality of human life [1, pp. 2-11]. Although the goals and objectives of the program

target the ideas of humanism, there are still doubts about the methodology of civilization problems' solutions based on civilization approach.

## II. PROPOSED METHODOLOGY

### A. General description

The methodology of the research implies dialectics, which enables to create ideational constructions of complex multidimensional objects as identities of opposite categories. Based on the assessments of ideological ideas about the past in the development of social systems, the categorical arsenal of philosophy makes it possible to put forward adequate judgments about possible ways for the development of humanity in the future. The work also uses general scientific methods and principles: conformity, complementarity, systemic nature and synergetics which allow considering the world as a multilevel self-developing system of vertical and horizontal relations. The paper also uses the method of idealization, which provides means for the creation of ideational constructions in an extremely abstract form. Idealization allows a variety of reflections of real social processes over a long period of development of the history of mankind to be reduced to the study of one integral, which in essential respects will conceptually reflect the stages of real history. Knowledge of the necessary aspects of social development can become a reliable tool for humanity for managing its future, which is so necessary for humanity in the face of global threats.

### B. Algorithm

There is much evidence that man, society and humanity belong to the category of self-organizing systems. This phenomenon indicates the existence of parallels that would be related to each other according to their essential characteristics. These parallels are a part of various interconnected levels of the systems. One of the necessary conditions for the existence and development of such systems is their energy and informational openness [2], [3]. But the infinite spatial energy openness of an integral system is impossible because this system is private and relatively limited in the real world of things. Therefore, reality understood as the totality of sensed things, is the sphere of systems which are constantly limited both in space and in time. Consequently, the question arises, "How to substantiate the continuous existence and development of a relatively limited self-organizing system in the energy-limited conditions of the surrounding world?" Apparently, a human body in the past faced precisely these circumstances in which the environmental changes and brain required more energy.

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The rise of energy consumption came into conflict with the possibilities of biological reproduction of a human being himself. Reproduction along with the possibility of energy consumption is one of the basic characteristics of a living creature. In these contradictory conditions of existence, the human child was forced to be born much earlier than the time required. Near the bifurcation point, in which the future man found himself, he discovered two possibilities for him. On the one hand, the biological degradation of humans, and simultaneously, on the other hand, this conflict situation was a necessary condition for the further development of human's consciousness through cultural development [4]. The network structure of the brain, due to its infinite informational openness, allowed a biologically limited person to develop as if he existed in the unlimited, virtual informational world of his own thinking phenomena rather than in the real world. The human brain in response to changes in the surrounding world was able to develop not by a quantitative increase in size. It developed through the unlimited expansion of structural plasticity, owing to the constant organization and restructuring of its internal connections. Therefore, the integral properties of the human brain were no longer determined by an extensive quantitative increase in information processing centers. They were qualified by emergent properties arising from the structural organization of the neurons related to the big hemispheres of the cerebral cortex. In other words, the reflectivity of the human brain was identified not by the number of neurons, but by the system of connections between them. Moreover, this network begins to form intensively in a person after his birth and gradually continues to develop throughout his life. It acts as a necessary condition for the emergence of consciousness capable of developing by reflecting the personal and social experience of his relationship with the world [5].

## III. RESULT ANALYSIS

The fractal order of systems' organization allows utilizing the reasoning about the organization of the human brain characterized by scale invariance principle [6]. The same principle can be used to interpret the importance of the Internet for the development of actors at all levels of humanity. The Internet was the result of reaching the limits of the extensive development of the industrial economy. The network organization of the Internet is super-individual in nature and is potentially capable of determining the structure of all mankind. At the same time, the Internet, based on which the structure of the information society is being formed, can be fractally correlated with the structure of the human brain [7]. The Internet was the result of the global quantitative distribution of capitalism throughout the entire territory of the Earth, which at the same time led mankind to the realization of the limitations and finiteness of its existence on the scale of the planet. Awareness of the planetary limb is a necessary condition for humanity to turn its eyes beyond the limits of the Earth. But at the same time, this is a condition for the development of enough mechanisms for the restructuring of social systems on the way to the formation of a unified system of humanity. This system stems from information technologies in economic, political, cultural relations among subjects at all levels (from an individual to mankind). The achievement of the limits of extensive development and the associated existential crisis simultaneously created the opportunity for human transition to intensive developmental tracks. Interestingly, this situation gave modern social relations extraordinary structural flexibility and led to the emergence of an information civilization. Today, the subjects of the economy related to the industrial paradigm of civilization realize the finiteness of the planet. They can't develop without destroying the subsystems of humanity. Information civilization, unlike industrial, does not develop outwardly through the quantitative expansion of economic elements, i.e. labor, capital, machines. Alternatively, it develops through a qualitative change in the organization of the economy. Modern economy stems from the expanding information links and turning them into technologies to produce things and social relations [8], [9]. Obviously today, the civilizational transition to intensive tracks stems only from the development of its content simultaneously preserving the obsolete forms of the economic and political organization of mankind which is characteristic of industrial society [10]. The fact is that the modern economy, the essence of which is increasingly determined by information, remains within the framework of the theory of commodity production value. Therefore, a modern economy relying on the value of things, existing without any objective theory of the value of information is fraught with global financial crises. This process indicates that the world economy and politics reach the point of their bifurcation. This point means choosing the trajectory of the further development of the system. For human beings, this may result in a vulnerable life full of negative destructive chances. The main source of this vulnerability is the man himself [11]. The fact is that the old system of organizing world politics generated by economically developed powers is not inclined to give up its positions without a fight even being aware of modern world limitations. Economic powers seek to ensure their energy openness by forcible intervention in the internal affairs of other countries. They achieve their goals by bribing influential people in small countries, military invasion, unleashing color revolutions. In the modern conditions of the energy-saturated world, all this is fraught with an aggravation of global problems for all mankind [12], [13]. The bifurcation point is the unstable equilibrium point of the system, which emerged in the theory of systems' stability. This point is known as "saddle" state type [14]. According to this state, the basic components of the theoretically possible unstable equilibrium are the complementary subsystems of culture and civilization. There is a growing body of literature indicating that the reflection of the culture in the history of mankind for a long time was realized through either the opposition to nature or, consequently, the opposition to God [15].

The thesis describing the opposition of culture to civilization in relation to the Western world was formulated by O. Spengler. He has convincingly proved that the transition of a society to civilization marks the path of gradual destruction of Western culture [16].

Spengler's research, on the one hand, can be interpreted as the warning of a cultural crisis in Europe, and on the other hand, it makes it possible to see the theoretical possibility of building harmonious relations between culture and civilization on the principles of complementarity [17]. N. Berdiaev also described the contradictory relations of civilizational and cultural values. If culture is elite and as a social memory it preserves the values accumulated by society in the entire history of its existence and acts as a limiting (normalizing) factor for the development of civilization, then civilization, on the contrary, is democratic to strive for unification of values, erasing differences between people, and producing a lot of benefits [18]. All this tells us about the real danger of unilateral public absolutization of the material achievements as spiritual values. Studies of social consciousness as a projection of the cultural development at a given period of historical time make it possible to build the theory of influence and control of civilization processes. This control emerged not through the civilization mechanisms themselves, but through a system of positive spiritual cultural values targeting primarily the quality of the proper spirituality of a person. The supersmart civilization of the Society 5.0 strategy seems to be trying to solve global problems that cannot be solved today, i.e. wars, raw materials' supply, energy shortages, environmental protection, demographic problems, etc. This attempt lies within the domain of the private existence of human subjects or cultural fragmentation. In other words, Society 5.0 is trying to satisfy the unlimited needs of a private person [1].

The common denominator of the whole diversity of civilizational benefits is money. Therefore, it is relatively easy for civilization to unite to receive mutual benefits that are basic to the existence of society. Consequently, if modern civilization tends to strive for integration at large scales, then culture, on the contrary, tends to differentiate. Culture, due to the nature of its development, constitutes a controversial opposition to civilization. Unlike civilization, culture today does not have a common denominator according to which one could assess all the diversity of ideas and values accumulated and existing in the world. If culture, in fact, aims at expanding the diversity of ideas and meanings and deals with the production of qualities, then civilization, on the contrary, aims at producing many things. Civilization targets the reduction of the whole diversity of values (both material and spiritual) to the unified value of money as a common denominator. This process results in the devaluation of spirituality in society to the level of sales aestheticization [19]. In other words, today's culture does not see its mission in raising the human spirit to certain heights, but it goes down to the level of massive consumption. The level of massive consumption is the only product that the mass consumer is ready to pay money for [20], [21].

At the point of an uncertain future in the developmental history of mankind, the achievement of an unstable balance between opposing value systems of culture and civilization becomes highly dependent on chance. This accident has two aspects: on the one hand, it is the source of everything new and underlies the creativity of the individual, and on the other hand, it can be the source of the destruction of everything existing on the planet. With the increasing scale of subjectivity in the energy-saturated world of civilization, the systemic pressure of power structures on a private person becomes extremely ineffective. Today this socially uncontrollable case is largely determined by the thoughts and actions of the person himself. These decisions depend on the quality of an individual personality whose spirituality is understood as the synthesis of morality and intelligence [22]. Mankind today faces the choice between equally likely values for further development. All further strategy of the asymptotic movement of mankind towards a new attractor depends on this choice [23], [24]. If civilizational value orientations win, then humanity is facing a catastrophe and a return to its development in its original states. In this case, humanity will have to start its new long millennial exponential ascent. If the spiritual values of culture prevail as priorities, then humanity will have a chance to rise to a qualitatively new state and become an integral unit of the cosmos organized at the level of all humanity [25]. The creation of a global information network of humanity resembles the black box model in cybernetics [26]. Therefore, the Internet in this interpretation potentially can form any relationship between the agents of mankind. It is known from the system theory that it is the nature of the structural organization that is responsible for the emergence of qualities in the system. These qualities are not reduced to the properties of system parts [27]. For the system of humanity, this means that the Internet, due to its structural flexibility, has the potential to radically change the lives of all people on the planet Earth. Synergetics as the theory of self-organization can, if necessary, state only the approach of qualitative changes in the development of systems. However, the very nature of these radical changes depends on the number of people with proper personal qualities. Consequently, the quality of the person is determined by the value-target priorities of each person. Private cultural entities that once determined the system of traditional values (ideals, norms, knowledge) of individual countries, gradually lose their ideological significance in the open world. Therefore, they lose their influence on the formation of the proper public consciousness. Social consciousness as the projection of culture into the time period is the system of significant values. This projection determines the real motivational activity of people at a given period of history. In terms of the cultural fragmentation of the world, the system of values in the public consciousness is increasingly beginning to determine the interests of a civilization whose main priorities lie in the plane of receiving benefits and the cult of money.

All forms of social consciousness, i.e. religion, art, science, law, politics, and the social institutions of reproduction and their derivatives, such as a church, cinema, education, medicine, jurisprudence, etc., become like business institutions and target material rewards. Of course, for some individuals, organizations and even countries this situation results in material well-being and wealth, but in general, this situation leads to the aggravation of global problems and threatens the physical destruction of humanity [28].

## IV. CONCLUSION

In the Society 5.0 program, the global problems of humanity are presented as problems of culture, however, they function as the problems of civilization. The attempt to solve global problems of civilization by expanding the production of civilizational benefits is contrary to the laws of the theory of control systems and feedback communication. An endeavor to solve the problems of civilization by means of the civilization itself resembles the treatment which indicates an attempt to realize in social relations a positive rather than negative feedback between culture and civilization. Theoretically, this mechanism of relations leads only to delay of the inevitable end of humanity. The violation of these laws can lead to the destructive separation of the integrity of the entire system of humanity. The problems of civilization must be solved through culture on the principles of counterbalances, i.e., through a system of balances of negative feedback. This system introduces pattern, according to which the significance of the material values of civilization is associated with the significance of the spiritual values of culture through the feedback loops, and vice versa.

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