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The key to the philosophy of a global society and all its institutions should be the thesis: «All the inhabitants of the Universe have a common origin; all people have a common human nature; all religions have a common divinity; the entire global community, and each individual separately have the only one common goal – to achieve development of its own perfection». This means moving to a new level of understanding to ensure peace and security in a multicultural society! It is crucial not to dally away!

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**Бескризисное развитие – это миф или закономерная реальность**

**FORECASTING THE FUTURE THROUGH THE PRISM  
OF THE NEW COGNITION METHODOLOGY,  
OR FUTURE CAN BE ONLY FORECASTED FROM FUTURE!**

Analysis and generalization of Russian and world experience as well as the conclusions drawn by researchers amply show that so far the problem related to selection of methodology to make forecasts (especially, for long-term perspective) is far from solution, as even mid-term and next-year forecasts cannot be defined as acceptably precise. Many contemporary theories and approaches address the problems, which, being most acute for Russia as well as for entire global community, will face the mankind in the foreseeable future; but, the methodology instruments being applied to this end are obsolete and irrelevant. So far, the statement that Russian economic science offers an integral concept of views on macroeconomic forecasting is not properly grounded. Evolution of such views can be described as the following:

- the future should not be forecasted at all as the present is more important;
- the future should be predetermined by the present;
- the future should be predetermined by the past;
- quantitative forecasting methods, built on the linear extrapolation of empiric data based on application and modification of mathematics and statistics, produce relevant forecasts only for the limited time, while even one-year forecasts do not become a reality in Russia. With the increased forecasted interval, dispersion of any quantitative characteristic, approximated by a casual value, would grow inevitably to the values, which make the forecast assessments practically useless;
- as a result of many-years search, specialists gradually concluded that any sufficiently objective forecasts could be only produced in the form of qualitative description. The qualitative forecasting methods are based on the multi-phase procedure of expert evaluations and analysis of judgments made by attracted highly competent experts in some or other fields of knowledge.

Therefore, it may be stated that the current level of understanding the possibility to forecast the future is connected with the use of qualitative methods. However, having analyzed the forecasts produced through the use of qualitative approach methods, we came to see that, in the essence, they,

too, were based on the same method of extrapolation - which, as we know, can only be applied for short-term forecasts. Even the «View from Mid-21st Century\*» («Взгляд из середины XXI века»), an American forecast, is based on the researcher's mental transportation to the future, wherefrom he restores the picture of events that could take place in the time section between the current moment and the moment of his being in the future. This discount of time makes it possible to restore, on the base of the accepted scenario, the logical chain of events that might result in its realization. The events occurring in the section of time between 2000 and 2050 are described by an imaginary historian from Oxford University, who depicts the events which allegedly took place in the US and the world as a result of consistent realization of the course by George Bush's presidential administration. This time, the subject of extrapolation is found in the past and present scientific knowledge, in the worldview based on quantitative and empiric thinking, as well as in the type of socio-economic system, political structure of states, plus endogenous and exogenous factors of growth. The «sensitive» points and objects of study are imported from the past and prolonged for the future. This applies to the current realities - for example, such as demographic situation, energy-supply problems, condition of environment, as well as development level of economy and social sphere.

The interests of appraisers and customers for the forecast are reflected in the vision of the future even in those cases, when the forecasters apply such progressive forecast methodology as «Foresight» linking the qualitative forecast algorithms (Delphi method, scenario approaches, etc.) with general approaches and state interests in governing the socio-economic development of society and interests of national business.

In the broadest context, the objective of methodology is to reach the fullest possible societal consensus on the agenda of socio-economic and science-tech development, while interests of population are taken into quantitative account (extrapolation of the formed demographic situation) and interests of a concrete human being are not considered at all. Also, this method is not immune against the influence of the appraisers' and forecast customers' interests.

The quality of forecasts depends on the current development level of economic theory. This level of understanding the subject matter is laid in many forecasts and extrapolated for the future (sometimes, very long-distance future) perspective. At the same time, however, there is a tendency to overlook the following points. First, any theoretical conclusion would be correct and precise up to the admissions accepted in its substantiation. Second, as evidenced by history of economic thought, empiric conclusions drawn with application of a mathematical or any other formal method would

be correct with some precision, which sometimes may not be definable and connected with the reality. For example, in 1988, the American Economic Association set up the commission to attend to university-level economic education in the US. In its rather critical conclusion, the commission expressed concerns that university-education programs might produce a generation with many idiot savants (graduates with narrow specialization and lop-sided development), who would have sophisticated knowledge of mathematical methods but know and understanding nothing about economic problems<sup>1</sup>. And, worst of all, those who graduated from universities of economics in the 1980w- 1990s, and who skillfully master mathematical instruments but have a vague if any idea of the essence and evolution of economic notions, now start taking most influential positions in university departments of economics, academic associations and journals of economic theory. Further on, their growing influence and power would promote the hegemony of formalism detrimental for conceptual and methodological studies. This problem is most timely for Britain and United States, where formalism won the most impressive victory. In other regions of the world, too, the same processes take place - although, probably, with some lag»<sup>2</sup>.

We did not have a thorough knowledge of strengths and weaknesses of the Keynesian theory. While, full of interest, we studied the fundamental work by Keynes, translated in Russia, the growth of state sector, bureaucratization of government institutions in the West and stagflation in the 1980s drove the world to disappointment in Keynesian prescriptions. Now, it is a fashion in Russia to be monetarists, but those who introduce themselves as such usually know little if anything about the alternatives - that is, evolution-institutional theory and new Keynesianism, while «monetarism» is no longer a fetish in the West. Globalization brought instability to the world markets, and therefore consensus is taking shape with regard to regulating of global economy. However, so far no solution has been found for the latter problem, because the economic science is undergoing another change of its paradigm, or, rather, another crisis. In the 1960s, economic science of the Soviet Union was developed mainly through methods of mathematical economics, which were applied actively in the system of planning and forecasting, and served a screen for economic studies.

<sup>1</sup> See: Krueger A. et al. Report and the Commission Graduate Education in Economics // Journal of Economic Literature. - 1991. - Vol. 29. - № 3. - P. 1035-1053.

<sup>2</sup> Hodgeson J. O probleme formalisma v ekonomicheskoi teorii. [On problem of formalism in economic theory] // Voprosy ekonomiki. - 2006. - № 3. - P. 113.

Neither in the Soviet Union nor in the West discourses on the economic agenda could be free from prejudices and interests, including those of ideological nature. Therefore, the outcomes of such discussions were predetermined. Many theories, including Keynesianism and monetarism are only correct with certain admissions, but they were made an absolute and a code of dogmas.

The focal point of the economic analysis remains the same: causes for poverty, sharp stratification of society and polarization of incomes - that is, mechanism of economic progress. However narrow the subject is made, the «goddamned questions» on driving forces of economic development, on primacy of production, exchange, distribution or consumption of goods, or on influence of economic institutions on dynamics and efficiency of economic activities arise again in any coming rounds of structural and transformation crises. The contemporary global economy as a whole looks like the system of trading cities of antique or medieval Europe. They, too, used to be called «enclaves of progress» and stood out visibly against the general background of other, backward territories. Such situation provoked conflicts and protests, as those times, too, were not free from «anti-globalists». Now, we see the new turn of the spiral.

Alas, some economists do not recognize and some not always recognize their responsibility for recipes to cure «economic diseases». The End of History does not exist, and even Francis Fukuyama himself suddenly announced that he once had offered such term only as a discussable hypothesis.

In 2005, the Newsletter of the Russian Academy of Science published an article by Academician T. I. Oizerman entitled as «Is It Possible To Foresee Distant Future?»<sup>1</sup>, in which he argues that the «really scientific cognition of the mankind's distant future is actually impossible»<sup>2</sup>. To prove his conclusion, Acad. Oizerman reproduces various points of view and analyzes quotations from such renown authors as K. Marx, S. Boulgakov, V. Mezentsev, J. Stalin, L. Lavallo, A. Gramsci, V. Lenin, G. Plekhanov, J. Mille, Ch. Furiat, J. Shumpeter, F. Haiek, and others, whose studies are based on generalization of theoretical and empirical data. In particular, the author refers to N. D. Kondratieff's theoretical conclusion, also derived from analysis and generalization of the vast mass of statistical and empiric information. Summing up his analysis of those views, Academician Oizerman writes: «Now, we may with all certainty

<sup>1</sup> Oizerman T.I. Vozmozhno li predvidenie otdalennogo buduschego? // Vestnik Rossiiskoi Akademii nauk. - 2005. - Vol. 75. - № 8. - P. 720-726.

<sup>2</sup> Op. cit. - P. 724.

answer the question: why is the future of mankind not cognizable in principle. The essence of the matter is that any conscious, expedient, and consequence-wise activities would inevitably generate unforeseen, unexpected, undesirable and elemental implications. Such elemental, undesirable implications would generate the even more elemental and more undesirable implications. The process would go on. And, such even more elemental and undesirable implications would cause the ever more elemental and undesirable implications ... , and negative consequences of conscious and expedient human activities are inevitable, inescapable, although their scale, probably, could be reduced somehow, but not nullified. People themselves create their history and themselves are the authors of their historical drama»<sup>1</sup>. This quite gloomy picture echoes the arguments of those authors, who believe that chaos and crisis are the necessary conditions for development. By such logic, as a result of development the mankind proceeds along the way of multiplication of no other but the undesirable and negative consequences. But then, Acad. Oizerman continues: «It is not only the elemental implications (i.e. - multiplied elemental implications - V. B.) of conscious human activities that make cognition of humanity's future entirely impossible. A no less important role belongs to the development of scientific cognition - a beneficial process, which the ever more actively serves the main productive force of the mankind. . Scientific progress seems to open the earlier unseen prospect for actual cognition of the future of mankind. However, it is not difficult to prove that science-tech progress does not at all contribute to resolution of such illusory task. The matter is that cognition of future scientific discoveries is impossible, while exactly the latter would determine - at least, to a great extent - the nature of society in 50 or even in 100 years from now»<sup>2</sup>.

So, according to Oizerman, the future cannot be predicted because of «... the historically forming human nature» and «because today we cannot possess our future knowledge»<sup>3</sup>. Is it really the case? Let us try to answer this question.

In February 2004, mass media published the contents of a secret document, prepared by major world experts on the order of Pentagon. This report was partially referred to in Chapter 1, but it seems worthwhile to quote some other abstracts here. First, about the authors. One of the experts, Andrew Marshall, age 82, now serves in Pentagon as the head of a think-tank assigned to assess

<sup>1</sup> Oizerman T.I. Vozmozhno li predvidenie otdalennogo buduschego? // Vestnik Rossiiskoi Akademii nauk. - 2005. - Vol. 75. - № 8. - P. 724.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

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the national security threat. By experts' opinion, security of the US and the whole world is under a serious and probably unavoidable threat. A powerful terrorist attack is being expected from the environment. Climate revolution is approaching. This catastrophe is much nearer than one could suggest, and within 20 years would kill several million human lives. By 2007, unbelievably powerful storms would destroy the coastal reefs in the Netherlands and thus a considerable part of the country including the Hague would become uninhabitable. By 2010, US and European countries would experience three times as more temperature peaks than today, and the heat would rise over 35°C. Tremendous losses would be caused to farmer agriculture.

Domestic conflicts and disorders would tear apart India, Indonesia and South American countries. The Planet might plunge into anarchy, as countries would resort to nuclear threat in order to secure the shrinking stock of food, water and energy resources. As an inevitable result of proliferation of nuclear weapons, Japan, South Korea and Germany will develop their own nuclear programs - like Iran, Egypt and North Korea are doing now. By 2020, nuclear conflicts would start their deadly procession through the Planet. This forecast is beginning to realize right now.

The above-cited examples of forecast assessments and actual events serve a reason to argue that there is no ground for any talk on sustainable development of human community. Meanwhile, the concept of sustainable development once in a while appears on the scene of political, government, mass media and academic communities. Raised at the level of «a new paradigm for development of human civilization in the new millennium») (see proceedings of the UN Conferences on environment and development of 1992 and 2002), this concept has been a subject for discussion in academic and journalistic literature for quite a time already. So far, however, there is no uniform interpretation of this concept, and therefore let us introduce our vision of the above.

By Ozhegov, «sustainable» means firm, balanced, stable and not subject to fluctuations. «Development» means a process of transition from one to another condition, from old to new qualitative condition, a process of change - whether reversible or irreversible, casual or regular. In other words, the notions of «sustainable» and «development» mean respectively «static» and «dynamic».

The combination of seemingly incompatible words «stable development) appears to make no sense unless we introduce another notion - the objective: whether we have sustainable, firm, permanent, vigilant and continuous development in relation to the objective? Hence, before we discuss «sustainable development» of human civilization as well as its socio-economic and political systems, it is necessary first to define the objective

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of its development and then to search the ways providing for continuous movement towards the given objective. So, what objective could predetermine «sustainable» (rather than simple) development and establish inextricable connection within the triad of «objective - development - sustainable)? What methodology would serve the basis for understanding of these questions?

By the end of 1960s, the Roman Club - an international non-governmental organization, founded by initiative of an Italian economist Aurelio Peccei, put forward a program to study the global problems and set the objective to provide society with methodology that would be helpful in reliable analysis of all «troubles of Mankind».

Resolutions, passed by the UN Global Forum, held in Rio-de-Janeiro, and by the World Conference on sustainable development held in Johannesburg in August-September 2002, recorded the accelerated pace of movement towards the global catastrophe. The need was felt the ever more acutely to find out the regularities that predetermined the processes generating such problems. So far, science, even in cross-disciplinary studies, has not yet found an answer to all these questions.

Today, the process of globalization is being studied through the prism of economic, social, political, cultural and civilization-related, science-tech and other aspects. Nevertheless, global community appears currently as a community, which has an unsustainable development trajectory, is not strictly predictable and controllable, and marked by a high level of uncertainty.

For example, today the US, EU countries, Japan and then Russia, while making a forecast of innovative breakthrough, put on the agenda such science-tech sphere as artificial intellect.

However, to create artificial intellect is not only and not so much a problem of engineering, economy, policy or socio-cultural sphere, but also a problem of social science. This argument can be supported by the following case in point.

The early 1980s saw the start of computers' introduction in the Soviet national economy and development of various types of computer-based automatic control systems. The pioneer of those R & D was Academician V. Glushkov. As a result, however, he arrived to the conclusion that to use computers in the system of relations prevailing in the Soviet Union would be the same as to install jet engine on a farm wagon. The system turned imperceptive of achievements reached in the progress of science and technology.

The problem appears especially timely today, in the era of information, genic and nano-technologies, virtual realities, DNA molecule- and ferment-based biological computers, etc. Scientists - among whom Kerwin Worwick is the

most active - arm computers with logical thinking at the most advanced mathematical level, and undertake measures to activate mental and psychical activity of humans not only through use of computer software, but also by contacting human mind with a computer and thus creating a human-machine cybernetic organism, the cyborg. This is no longer a piece of science fiction, but rather a case of real experiments. Advent of self-learning robots posed a threat that humans would be replaced by and lag behind machines in the sphere of intellectual activities.

In other words, today, like 20 years ago, the existing development model for human community in general (notwithstanding all transformations that took place in that period) runs counter to achievements in science and technology. Today, mankind is at the brink of self-annihilation by its own intellectual inventions, while human society appears as extremely unstable - that is, least predictable, least controllable and marked by a high level of uncertainty.

As pointed out by N. N. Moiseev, «at a certain stage of civilization development, mankind would have to undertake responsibility for its further evolution»<sup>1</sup>.

At the same time, his book «Mankind ... To Be Or Not To Be?» contains the two statements, which might appear mutually exclusive: (i) «If human beings do not find a proper key to their relations with nature, they will be doomed to perish»; and (ii) «I want to warn readers of this book that they would not find herein any specific recipes for salvation of mankind. Such remedies cannot exist because the future is unpredictable»<sup>2</sup>. At first glance, the latter statement by N. N. Moiseev supports the view of T. I. Oizerman.

However, if we address this problem from the future rather than from the present and past (the latter approach conforms with traditional research methodology), we shall see that human beings can cognize the development laws of their existence and learn how to rule such development. I use exactly this approach in my studies. The accumulated data and their practical probation served the basis for me to formulate the new methodology for cognition of regularities in development of human community. Results of research, presented in numerous articles, have been published in different monographs and journals issued in Russia and abroad, and have been as well presented at Russian and international conferences.

<sup>1</sup> Moiseev N.N. Universalnyi evolutionism. [Universal Evolutionism] // Voprosy filosofii. - 1999. - No. 3.

<sup>2</sup> Moiseev N.N. Byt ili ne byt ... chelovechestvu? [Mankind ... To Be Or Not To Be?]. M., 1999.

The new methodology was applied in my research of regularities and prospects of societal transformation, in development of model for long-term forecast of Russia's sustainable development as well as in substantiation of the concept and strategy for building the information society. The same methodology made it possible to identify the deep-seated systemic causes of terrorism as well as man-made and natural disasters, and produced positive results in development of the artificial intellect philosophy, etc.

The materials and conclusions, accumulated in the recent years, serve a ground to state that the new methodology for cognition of regularities in development of human community can be applied to the full extent in order to find responses to the challenges of the 21st century.

Basing on results of my studies, I was able to articulate the clearly-cut axiomatics of the new methodology for cognition of regularities in development of human community (hereinafter, new cognition methodology) - that is, the four fundamental provisions:

First Provision of the New Cognition Methodology: Human community is seen through the prism of the paradigm that the entire system and parts thereof exist and evolve only for attainment of a single (shared) objective.

The single objective means the objective, which cannot be a sub-goal or a means to reach a higher objective, and at the same time is a beginning (feedback) of a qualitatively new spiral in development of the system as a whole and each of its subsystems. If development of the entire human community and its parts is seen as development of an integral system and through attainment of the shared objective, then the past, present or forecasted situation can and must be juxtaposed to the given objective. This would help in realizing the development level, contents of direct and reverse connections as well as their influence on development of sub-systems and the system as a whole. Therefore, if any socio-economic, political or another system may be considered through the prism of attainment of the objective, hence such objective is of planetary or global dimension.

Further on, if the current practice of socio-economic, science-tech, political and other development in Russia (or in whatever the country) is juxtaposed to a theoretically identified objective, such juxtaposition would help identifying the redundant or missing links in the mechanism of its realization and to define the shortest-time and hence the most efficient and stable way of attaining the given objective in the foreseeable future.

Basing on such theoretical approach, I could find out that such shared objective could only be seen in development of specific human being in all diversity of his

/ her material and spiritual needs, through to the need to attain the Supreme Reason with equal and free access to infinite diversity of goods and benefits. Hence, a human being is neither a link nor an element of the natural process of wildlife evolution, not a factor of development, but rather an objective.

However, human being is also the beginning of such development, because the first human need was not to improve the tools of labor, but to realize oneself as a human, to survive, and to reproduce a new human life. That first satisfied need helped humans to realize that in order to survive and to reproduce a new human life they had to satisfy their needs in products supporting that life. Therefore, humans came to have a new need - to create and improve their tools of labor. In other words, satisfaction of human need would establish a direct connection with attainment of the given person's development objective as of the given moment of time, while generation and growth of new needs would set a reverse connection in the system development. If the interests of manufacturer-human and consumer - human are concerted, then human community would develop towards attainment of the objective. At the current development level of material production, when production and ultimate consumption are divided in time and space, the most important conclusion from our research is that if the development objective of socio-economic system is other than Human Being, then the deadlock - or, rather, a global crisis with catastrophic consequences - would be inevitable.

If, together with global proliferation of internet technologies, intercommunication is established with a limited circle of people rather than with each human individual, and if production shall be oriented to satisfy interests of abstract consumers, then disproportions in time between production and circulation of commodities would grow multiply. Property will remain only in the corporate (today transnational corporations already control over a half of global GDP) and / or government ownership and be oriented only to the owners' interests without any regard of the end consumers' interests, and therefore all disproportions will be aggravated. Thus, in the circumstances, when the state would sustain the functions of a market actor and at the same time keep the functions of government command and administrative regulating as well as internet technologies, it could have the instrument, by which the single center would accelerate, proportionally and in the planned fashion, the processes connected with production of end products for public and personal consumption, commodities and services. Meanwhile, the time for manufacturing of a production unit will be reduced, and as the manufacturing processes will be accelerated, the law of needs growing in time will work effectively. Therefore, it will be required to produce the growing mass of commodities, while in the conditions when social objectives must be attained within the shortest periods, each unit of satisfied need (demand) must be provided

by the multiply growing supply. Mathematician economists would not be in difficulty to prove correctness of this statement. It seems that in the given case we could apply mathematical instruments of V. K. Dmitriev, a Russian mathematician economist, who argued that the future (forecast) would be characterized by the zero norm of profit, and we would approach such future, if we accept the Marxist trend of reducing norm of profit, or removing from it if such trend is absent. In the economic science, such postulate is one of prognostic models having a strict formal basis. So, all kinds of resources available in a society must be transformed into the end product, but the society's development objective will not be attained. The planned and proportional nature of production will be nullified by uncertainty of consumption.

The situation in contemporary Russia is marked by another extremity: underdeveloped demand, low income level of the major part of the population, uneven socio-economic development of different regions (major per capita indices differ 10 - 15 times and more). In such circumstances commercialization of internet trade (the most profitable sector of capital investments) would make it unaffordable for the majority of population, while unrealized needs would not generate growth of new industries, and therefore capital might withdraw from that market. As a result, the regions' development would be even more uneven, and the gap between different population strata even wider. Thus, capital and resources would leave for other countries. The time of money circulation multiply exceeds the time of commodity production, and the global-scale catastrophe is inescapable. The remedy is to introduce a specific human being into the system of production and consumption.

If any country sets its development objective as militarization of economy, then international relations will be those of confrontation rather than dialogue, while on the domestic scene the socio-economic growth would slow down in favor of arms race, and sustainable development towards the objective would be ruled out. Let us consider another objective, such as economic liberalization. Its attainment would inevitably cause societal stratification between the poor (the bigger part) and rich (the lesser part), as well as stratification of countries by per capita GDP, accumulation of human capital, etc., and such outcomes would inevitably lead to international confrontation rather than international dialogue. If society as a whole does not set its objective as development of specific human being, but rather some of human needs, with preservation of the same model for development of public production oriented to satisfaction of abstract consumer's needs, then, as evidenced by the studies, the society will get the same negative result - that is, accelerated depletion of all kinds of resources and, again, no attainment of the objective. This conclusion applies even to the needs, selected by the most «sensitive points» of development

as defined by the UN General Assembly in the «Millennium Development Objectives», or by the points identified in the current natural projects of Russia.

Therefore, the theoretically substantiated selection of objective for development of socio-economic system should include overcoming of crises, selection of relevant forms and methods of government regulating, transformation of economic, socio-cultural, political, science-tech and technological spheres of society, as well as development of proper conditions for transition to innovative mode of development.

Second Provision of the New Cognition Methodology: The latter is based on systemic, cross-disciplinary and even multi-disciplinary approach. In other words, development of the entire human community and its parts in whatever section (civilization-related, formational, national, confessional, territorial, socio-economic, political, organizational, etc.) is addressed as development of an integral system. The systemic approach, which offers the integral vision of the problem, combines the best elements of approaches «from general to partial» and «from partial to general», and suggests to use instruments from and at the juncture of various fields of knowledge - such as: economics, sociology, philosophy, cybernetics, neurophysiology, psychology, spiritual knowledge, etc.

Third Provision of the New Cognition Methodology: all the variety of processes and phenomena would be analyzed though just one index, the time. Today, neither GDP or GNP, nor human potential development index or other indices would make it possible to identify the cause-and-effect relation of all processes and phenomena, as the change rate of economic reality is higher than the rate of its exploration. For example, the occurrence of banking crisis, bankruptcy of major companies, replacement of a political leader, etc., might cause immediate transformation of the world picture. Moreover, as noted by contemporary analysts, the absolute majority of sources describing, for example, the problems of US economy, tend to consider the phenomenon of the so-called «new economy» at no other but the empirical level. The latter circumstance is a natural result of the current condition of statistics. First, sometimes reliability of statistical data is quite doubtful. In this context, it seems interesting to see the Western experts' assessments of the Chinese economy. Purchasing power of China's population is rather low. The government says that the country is free from inflation, while prices for foods and commodities are growing. For this reason, many experts do not believe official statistics and see the data on GDP growth - in particular, 9% in the past year - as «false figures». Second, the bigger portion of statistical information, which is considered in economic research, represents some interpolation of basic parameters on the base of certain models, the most of which were developed in the «boom» period of mathematical programming,

between the late 1950s and early 1970s. Therefore, these models, in principle, are unfit to describe the phenomenon of the «new» (i.e., contemporary) economy, at least because the growth rates typical of the latter exceed the limits of the minor-errors area of those models. In this sense contemporary science cannot say precisely if it approached the dangerous line of ignorance, or crossed that line, or still has a sizable margin of safety. It seems that traditional (or, in contemporary terms, orthodox) science does not have a margin of safety any longer. So, human knowledge of economic reality, while growing like an avalanche, becomes outdated immediately, because when this knowledge is used and conclusions are made, the picture of the world would be entirely different already. Hence, we need a different paradigm, a different index and a different rate of obtaining information and knowledge.

The only chance to secure the situation, in which knowledge would not be outdated but would outpace the really occurring socio-economic, political, science-tech, organizational and other processes is to obtain the knowledge from the future. And, the time between emergence and satisfaction of a material and spiritual need of any specific human person and society at large should become the only criteria of efficiency in attainment of the objective.

This leads to the Fourth Fundamental Provision of the New Cognition Methodology. The functional and developmental efficiency of the human system and any of its parts shall be considered through the only one criteria - the time that would pass between arising and satisfaction of a need felt by each specific human being and the society. If such time tends to reduce continuously and evolutionally, then the human system develops efficiently in relation to the set objective.

Therefore, in terms of reaching the ultimate objective of human community development, we must know a priori as to what socio-economic and political structures as well as what technological systems would be relevant to the given objective, what is the instrument for their realization, and how the human interests would be reconciled and realized meanwhile. Without mutual relevance of the said structures, technological system and the objective, and without an instrument for its realization, the system could take monstrous forms through to self-annihilation. By finding the proper conditions for relevance of socio-economic and political structures, technological system and mechanism for realization of the objective, we would come closer to this objective, and the more rapidly the processes would proceed, the nearer we approach the objective. If the time reduces, it would mean evolutionary development of human community, while the growing time would mean prevalence of involution development process and reverse movement.

It is not unreasonably that many researchers note that societies and individual civilizations, communities and countries in the process of their development there were periods of rapid development, periods of creation, as well as periods of slower-pace development and even collapse. This can be confirmed by data on socio-economic situation in Russia in the course of its reforms. For most of Russian citizens, the time between appearance of, and possibility to satisfy the need in staple commodities - to say nothing of such socially important needs as family reproduction, education, medical care, better housing - has grown tangibly. Therefore, when we say that the knowledge should arrive from the future, the future is understood as the condition of the societal system development, under which the time between appearance and satisfaction of the need of each specific individual and the society at large would gravitate to zero. Such approach helps to develop an integral view of any problem.

As we see, all provisions of the new cognition methodology have been confirmed and remained unchanged, except formulation of the single objective of human community development. Before, I argued that the single objective of the human system development was the Human Individual with all diversity of his / her needs. As a result of further studies, the objective has been specified as the following: the single objective of human community development is seen as development of any specific human individual, with all diversity of his / her material and spiritual needs, through to the need to reach the supreme reason with equal and free access to the infinite diversity of goods. By reaching the Supreme Reason, a human being would approach the image and liking of the Author of Life. For Human Beings and the entire society, only such purpose is the supreme objective, because within the earthy existence it cannot become a sub-purpose of a higher objective.

This conclusion is important for resolution of development problems at the confessional level. Would it be correct to say that in the era of globalization, such understanding and acceptance of the purpose of existence by the entire population of the Earth can serve a key factor for improvement of relations between the major world religions, between religion and realities of daily life, as well as between religious and political circles? In my view of a researcher and believer, this will be exactly the case, because in the scripts of all religions of the world formulate, although in different words, one and the same objective for Humans: to become more perfect and to approach the God.

What would be the philosophy for formation of global future in the context of the new methodology for cognition?

All of us are aware of the fact that today, as never before, the world is concerned with the problem of finding a way out from the lingering socio-

economic crisis. Poverty, malnutrition and diseases hit many countries. By UN data, over 1 billion people live in extreme poverty, for one dollar per day; every year 10 million people die from hunger, while every day about 30 thousand children die from malnutrition and full absence of medical care.

Mankind is looking for efficient mechanisms to prevent the global terrorist threat to the world stability. Tragic events of September 11, 2001 in the US; terrorist actions in the Russian towns of Beslan and Nalchik; explosions in the London subway, in resorts of Turkey, Egypt and Bali; bashing raids in Paris, omnipresent xenophobia - this is not at all a full list of brutal terrorist actions that have occurred recently throughout the world.

Mankind also seeks to find proper instruments to be aware of and prevent man-made and natural disasters of global and regional magnitude. Only the three calamities - tsunami in Indonesia, «Catherine» and «Rita» hurricanes in US and earthquake of May 2006 in Indonesia - killed several hundred thousand people and caused material damage worth of several billion US dollars. By forecasts of major world experts, in the nearest 20 years natural disasters would kill millions of human lives.

Today, many academics ask the question: Shall we consider the word civilization development crisis, wars, terrorism, man-made and natural disasters as transient phenomena and incidental events, or rather as a chain of cause-and-effect relations between phenomena and events, caused by operation of deep-seated laws, which, being general for nature and society, are laid in the basis of co-evolution development of the world system?

Let us try to address this question through the prism of the new cognition methodology.

Theoretically, the new methodology suggests that the time between arising and satisfaction of a need - in view of attaining the objective - is the vector of time (or, axis of time) from infinity to zero (fig. 1).

On this vector, development of mankind and its various structures through to a specific individual got distributed by different points, and at any given moment, the time between appearance and satisfaction of the need can reduce or grow, thus approaching or removing from the objective. The time vector represents the linear vision of the problem and can be discussed, if life of human community is viewed in statics, as of a specific moment of

<sup>1</sup> Devezas T.C., Modelski G. Power Law Behavior and World System Evolution: A Millennial Process, Technological Forecasting and Social Change 70, 819-859 (2003).

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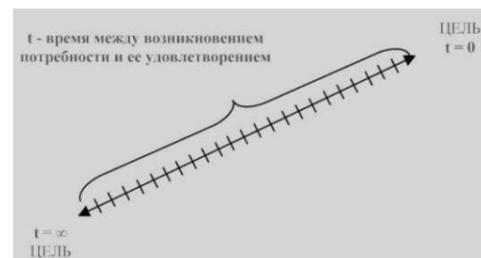


Fig. 1. Vector (axis) of Time

time. In reality - that is, in dynamics - everything is much more complex. Today, different communities have their own time between appearance and satisfaction of a need and such times do not coincide either in statics or in dynamics. Moreover, the processes of time change can be positive and negative, cyclic and sinusoid, direct and reverse. If these processes are not analyzed in relation to communities but rather to a specific human individual, the numerical value of such diversity would probably be expressed with multi-degree figures. So, every human individual lives in a kind of his / her own sphere, under the effect of centrifugal and centripetal forces, within the Brownian agitation, in his / her own microcosm, which does not overlap with microcosms of others (fig. 2).

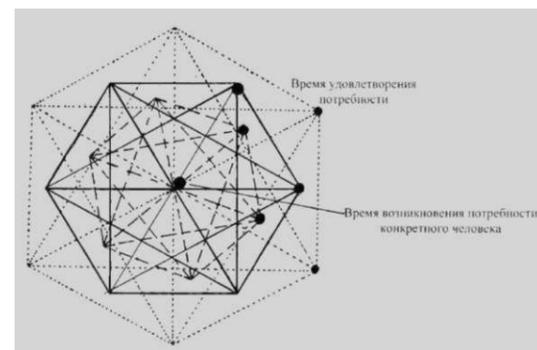


Fig. 2: Microcosm of Human Individua

So, if civilizations, nations, countries, minor and major communities as well as human individuals are «located» in different linear and spherical space of time, they will never be able to reconcile their interests and to understand one another.

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Exactly this circumstance generates all troubles of mankind and their aggravation. Therefore, the global civilization development crisis, wars, terrorism, man-made and natural catastrophes are the result of operating profound laws, which are general for nature and society. More than that, as long as people are located in different linear and spherical space, there will be an impression that many local civilizations, different from one another coexist on the planet.

Even Spengler argued that peoples from different societies (by my theory - from different spaces of time) were not able to communicate with one another successfully, and that thereby developed theories would be incompatible. Hence, it appears that processes of evolutionary and involucional development in respect to the objective overlap within the same time in history, and the synergic conclusion is made that crisis, chaos, non-linearity, etc., are the necessary and even useful precondition for development. Counter to this, we see invention of the ways (strict rules) for co-evolution - forceful unification of different-level world into a single organism. It is not without a reason that specialists in synergetic - a new non-traditional forecast methodology - use to refer to Denis Gabor, who said that the future could not be predicted, but it could be invented<sup>1</sup>. Therefore, socio-economic and political thinking as well as theories developed by people living in different dimensions of time or at different points along the vector of time, would not overlap and cannot be overlaid on, or applied to one another. For example, Adam Smith, in his concept of «invisible hand» of the market, modeled an ideal societal structure. In that society, everything was balanced, while its self-propelling and self-improvement were secured. That arrangement, however, was only correct until the imbalance occurred in the time proportions between production and distribution as well as between exchange and consumption, and until the inverse relationship, destructive as such, manifested itself. Then, society was thrown far aback, and we find many such cases in history. The same as well applies to theories by Marx, Dmitriev and many others, whose teachings were correct - but only when applied to evolutionally developing unidirectional time of history. It should be noted inter alia that exactly for this reason everything that was done in Russia as advised or imposed on the part of Western experts under the Washington Consensus doctrine did not result in growth of Russian economy, but - on the contrary - did result in retrogressive development. The differently directed historical time of the West and Russia could not be brought together.

<sup>1</sup> Knyazeva E.N., Kourdyumov S. P. Buduschee yi ego gorizonty: sinergeticheskaya metodologiya v prognozirovanii. [The Future and Its Horizons: Synergetic Methodology in Forecasting] // Synergetic. Seminar Proceedings. Vol. 4. Moscow: Moscow State University, 2001. - P. 5-19.

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Contemporary researches of civilization-related foundations of global economy set forth an assumption that should our contemporary meet a representative of ancient Egyptian, ancient Roman or ancient Chinese civilizations, the two interlocutors would never understand one another.

In the 1990s, Samuel Huntington, an American philosopher and political scientist, warned that in the 21st century mankind would probably plunge in a new world war<sup>1</sup>. The latter would not be caused by economic, political or ideological disagreements, as it happened in the past, but rather by incompatibility of human cultures and civilizations. On January 18, 2002, the «Poisk» newspaper published a review of the report, presented at the RAS Presidium by Dr. Apollon Davidson and entitled as «Seizure of Europe», in which the author argued that the events of September 11, 2001 were a challenge to Western civilization. Having exposed vulnerability of the most powerful country in the world, terrorists now can hope to build up their ranks by new recruits from the «Third world» countries, who always had strived for revenge. As argued by Davidson, the feeling of grudge for five centuries of humiliation (the Crusades) is even more bitter, when coupled with strive for self-affirmation and envy of the rich West. As a result, all these feelings produced a kind of «detonating mixture», which - unless urgent measures are taken - can explode and put existence of mankind under jeopardy<sup>2</sup>.

Therefore, as a result of uneven and differently directed development (evolution and involution) of various socio-economic subsystems and the entire global system vis-a-vis attainment of the objective, today communities from different spaces of time coexist on the Earth, while their peoples reproduce different views of societal development and enter in irreconcilable relations with one another. Therefore, application of evolutionary informational logic, developed by Professor O. M. Yun, to forecasting of science-tech development, would not produce a desired result. In order to create conditions for evolution development of societal system in relation to the objective, or bringing the whole Mankind into one and the same space of time, it is necessary to sort out in proper order and to integrate the entire complex of knowledge and theories.

A totally different interpretation is given for the theory of self-organizing systems, or synergetic. For example, the principle of «coherence», which in synergetic stands for coordination operation of all elements in the scale of the system as a whole, would appear in a principally different light, when applied in the system,

Huntington S. The Clash of Civilizations and Remaking of World Order. N.Y., 1996.  
Davidson Apollon. Zakhvat Evropy. [Seizure of Europe] // Poisk. - 2002. - № 3 (661).

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which is continuously transforming and organizing itself towards the single (shared) development objective. If the synergetic indicators suggest that the system in question is of the closed nature, that the non-linear processes proceed more intensively, crisis is looming over, risks are growing, etc., then we should read that the system is in involution in respect to the objective.

The new cognition methodology offers a radically new interpretation for the theory of evolution of machines and humans, as well as human consciousness. From the neolith age and through to today, machines have undergone evolution (through the periods of slow-down and acceleration) from the most primitive labor tools through the modern complex machine systems for manufacture of various products with application of calls-technologies - that is, continuous improvement and sustainment of these products life cycle and the more orderly technological interaction of developers, manufacturers as well as trading and service organization. The second industrial revolution, started in the mid-20th century and continuing until now, is connected with replacement of humans by computers in such function as processing of information on technological conjugation of machines and regulating of technological regimes for operation<sup>1</sup>. The process of machines' evolution is marked by reduction of time being spent for manufacture, transportation, storage and service per production unit - not only in separate links of technological chain, but it is also synchronized between the links and at the juncture of separate stages of the product life cycle.

Evolution of humans and human consciousness is an entirely different matter. As already noted, the time between appearance and satisfaction of a need is growing rather than reducing for majority of population in Russia and in the whole planet. Therefore, the end consumption product, manufactured by the super-modern technological chain of machines and humans, synchronized in time and in space, would be demanded by the reducing portion of population. For the rest population, the end consumption product would be either not manufactured, or lost, and all kinds of resources spent for its manufacturing will be wasted therewith. On the one part, there is manufacturing of evidently unnecessary product, and on the other part there is evidently unsatisfied need. But, an unsatisfied need does not provide an impulse for growth of needs and hence does not create incentive for production. Thus, the circle gets closed. Hence, the inverse relationship - the feedback for the whole technological chain of the machines-and-humans system emanates from the end user and through his / her consciousness. Exactly the

<sup>1</sup> Yun O.M. Metodologiya dolgosrochnogo prognozirovaniya razvitiya informatsionnogo soobshchestva. [Methodology for Long-Term Forecast of Information Society Development]. Moscow: IKF, 2004.

human consciousness sets this inverse relationship. On the following pages, we shall try to show the operational mechanism of such inverse relationship from human consciousness) in the light of the new cognition methodology.

As early as on the early 1980s neurophysiologists noted that non-satisfaction of the first need of the newborn baby could disturb synchronization of interaction between his / her brain structures. Article by A. M. Ivanitskiy, published in the RAS Newsletter of 2004, supported this argument in a different interpretation. By A.M. Ivanitskiy and S.V. Medvedev, Director of RAS Institute of Human Brain, we see the following logic of discussion<sup>1</sup>. Human consciousness is comprised of thoughts, is a result of brain functioning, and ensures mental processes as well as each mental phenomenon, such as decision-making, perception or speech. These phenomena correspond to quite certain retuning in neuron activity and in neuron-to-neuron connections. Changes in neuron activity can cause changes in human behavior and human thoughts. The very thought is born as a result of «polling» the brain structures connected with function of memory and motivation, while in order to sustain consciousness the proper conditions must be in place to integrate interconnections of the brain's neural structures into a single and rhythmically synchronized system. The higher the level of synchronization or co-tuning in functioning of all brain structures and the more efficient the processes of thinking, the higher the level of consciousness. «Consciousness», writes A. M. Ivanitskiy, «is based on the idea of innovation, providing the life with its supreme reason and predetermining the permanent human strive for novelty»<sup>2</sup>. In social sciences, the latter means the idea of raising the level of and satisfying new spiritual and material needs. Hence, if the time between arising and satisfaction of a need tends to reduce, then the functioning of all brain structures will be synchronized better, leading to the higher-level consciousness and evolution in the given human's development.

Therefore, the herein outlined objective of human community development is not simply the only possible, but is also biologically predetermined by human nature. «An average human being», writes S. V. Medvedev, works in order to live.

<sup>1</sup> Ivanitskiy A.M. Estestvennye nauki yi problema soznaniya. [Natural Sciences and the Problem of Consciousness] // Vestnik RAN. - 2004. - Volume 74. - № 8. - P. 716-723; Medvedev S.V. Poznat' svoi mozg - znachit rasshirit sobstvennye vozmozhnosti. [To Cognize One's Brain Means To Expand One's Own Potentials]. Saint-Petersburg: SUP, 2003. - P. 51-67.

<sup>2</sup> Ivanitskiy A.M. Estestvennye nauki yi problema soznaniya. [Natural Sciences and the Problem of Consciousness] // Vestnik RAN. - 2004. - Volume 74. - № 8. - P. 716-723.

Whatever explanations he hears that he must not work for his wife and children but rather for triumph of the world communism, he will never understand such argument at the biological level<sup>1</sup>. Incompliance with biological laws and neglect of regularities of human community development «can be manifested in form of the need to conduct brutal repressions, or in form of a wave of violence and disobedience sweeping the society, and, finally in form of rapid deterioration of public health and the growing numbers of neuroses and suicides»<sup>2</sup>. Hence the conclusion: today, evolution of machines and involution of humans and human consciousness are evident. In these circumstances, we may not exclude the scenario of human community development, in which the main role will be assigned for the artificial intellect, with the human being as its appendix. In my view, direct (evolutional) and reverse (involution) processes will continue unless and until the regularities, identified with the help of the new cognition methodology, are properly understood, or until socio-economic and political structures as well as the technological system elementally reach some mutual relevance and all of them provide for development of human community towards the objective.

This fact is supported by data on development of information technologies and growing number of Internet users while enactment of Internet was a fantastically great breakthrough in reduction of time between arising and satisfaction of needs. In 2005, by assessments of US Internet Council, the number of web users in the world grew to 1 billion. At the same time, in the Middle East, Internet is just starting to be introduced among common people in Arab countries, and is only available for officials at universities and government institutions (although in Turkey and Egypt access to Internet is available in the beach).

However, today for the US and other countries of the «golden billion», the time between arising of the need in dollar and its real productive application is growing tremendously. In the world of today, the stock of dollars, currency and gold is so huge that no investment projects can be found in the world that could absorb such investments and make them work. Therefore, conditions must be created for a new project, and that served the reason for the war in Iraq and a year earlier for interference in domestic affairs of Yugoslavia and other countries. Contracts for restoration of Iraq had been made before the

<sup>1</sup> Medvedev S. V. Poznat' svoi mozg - znachit rasshirit sobstvennye vozmozhnosti. [To Cognize One's Brain Is To Expand One's Own Potentials]. Saint-Petersburg: SUP, 2003. - P. 51-67.

<sup>2</sup> Ibid.

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war began, and they had been won mainly by US companies<sup>1</sup>. So, in order to reduce the time between arising of the need in dollar and its real payoff, it is felt necessary to find the situation for capital investments. While in the years of Great Depression the manufactured goods had used to be burned, today, in addition, terrorist actions and wars are launched.

Here is a case in point. Theoretically, if communities and specific individuals are «located» in different linear and spherical space of time, it means that they live in different socio-economic environments. Hence, they differently perceive (or totally reject) achievements of science-tech progress including information and communication technologies.

It is most important to understand that today many countries including Russia started to develop their national innovation systems, the arsenals of which contain R&D of the sixth technological tenor, such as: nano-technologies, biotechnologies, fantastic information technologies and security systems technologies. However, there is no warranty at all that these achievements would not be applied for destructive purposes.

For example, R & D of new, even more powerful and dangerous weapons are continuously underway. The same applies to the sphere of nano-technologies, where scientists are working to create micro-robots that would be able to perform any actions and at the same time to keep reproducing their replicas - by the same principle as reproduction of living cells. Furthermore, today there is no confrontation of two superpowers, but the world is faced with a bigger threat of terrorism. Mass media reports say that leaders and ideologues of terrorist organizations, using advanced information technologies and armed with modern samples of weapons, cherish plans to use mass destruction weapons through to miniature atomic bombs. Criminal groups, tightly connected with terrorists, also introduce most advanced achievements of science and technology in their operations.

Extremists and terrorist organizations, using ICT, set close interconnections in real-time regime and may grow into powerful terrorist internationals capable of challenging the whole states. In this context, we see such real threat as appearance of entirely new versions of technological terrorism. More than that, as evidenced by the world experience, use of informational and telecommunication technologies would accelerate polarization of the world, widen the gap between

<sup>1</sup> Борба за irakskie contracty. [Fight for Iraqi Contracts] // Rossiiskaya gazeta. - 2003. - № 15 (405). [www.rg.ru/arhiv/2003/12/23.html](http://www.rg.ru/arhiv/2003/12/23.html)

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the rich and poor as well as technologically advanced and backward countries - the gap that serves the main source of instability as well as the present and future conflicts of different, including global magnitude.

Meanwhile, science-tech progress continues, and the current agenda includes the new task of building information society. However, the currently existing social, economic, political, organizational and science-tech differences do not make it possible for different countries equally to use advantages of digital technologies and to integrate their application at the global level.

Quite recently, a report, entitled «Outlining the global future» and prepared by the US National Intelligence Council, appeared in Internet. Attempting to forecast the global development through to the year 2020, the paper attracted close attention on the part of international expert community not only for its profound assessments, but also for the main conclusion that in the rapidly changing world the ever less countries retain their intellectual capital sufficient for comprehensive analysis and forecast of such changes.

Another report, «Review of Global Innovations»<sup>1</sup>, published in 2004, is prepared by experts of IBM Corporation with due regard of views by leading scientists and scholars, customers, partners and leaders in other spheres of crucial importance for innovation - all in all, from 96 organizations located in 26 countries and regions. As suggested by IBM experts, they started this world-wide talk in order to find an approach to innovations through the prism of identifying regularities in societal development. Such approach, however, happened to be too complex and wide, and could not be found by the given international team of researchers - notwithstanding the fact that global discussion of the changing nature of innovations at the dawn of the 21st century included meetings in New York, Shanghai, Washington, and involved 109 experts from different countries, 100 researchers, consultants and experts from IBM, plus 25 additional interviews with leading thinkers of the world. Therefore, IBM experts limited their conclusions by only those innovations that were amply visible in the three spheres, such as: healthcare; state and citizens; business in work and life. As written in the report, they did not seek to find answers and did not try to predict future, because the world is changing too rapidly and cannot be «fixed», while the assumptions, on which forecasts are made, change more rapidly than fashion. Rather, the intention was to find the sparkles that would draw light on the changes»<sup>2</sup>. So,

<sup>1</sup> International Business Machines Corporation New Orchard Road, Armonk, NY 10504 Review of Global Innovations. International Business Machines Corporation, 2004.

<sup>2</sup> Ibid.

without cognition of regularities in societal development, it would not be possible to find the innovation that would offer answers to the most acute questions of our time. In my view, this could be explained by the fact that today the contemporary science has approached the dangerous line of ignorance, when all available methodological instruments of various theories have exhausted their analytical and prognostic functions.

To forecast the future sometimes might be dangerous, as negative scenarios and therein laid «thought forms» can be self-realized. Those thoughts are material and could be applied in order to create, to cure, to increase crops, to correct weather, as well as to kill or to make a person to commit unusual actions, through to crimes, has been proven scientifically more than once.

In other words, today as never before, the existing model of human community development (with all transformations occurred in the course of existence) runs counter achievements of science and technology. Today, mankind is at the brink of self-annihilation by means of its own intellectual breakthroughs.

Hence, we need a different paradigm, a different index and a different rate of obtaining information. That is, we need a different methodology for cognition of regularities in human community development. Thus, we may conclude that the need in a different approach to analysis and identification of the laws of human existence, in a new methodology for cognition of regularities in human community development is felt in the air and is ripe as it has never been before.

I draw these examples in order to illustrate how great is the responsibility for consequences of decisions being taken on the basis of forecasted future, and formation thereon of global community and its institutions, especially if the latter neglect the effects of general profound laws laid in the basis of human system development. Therefore, to build proper conditions for evolutionary development of societal system in relation to the objective and to bring the whole mankind into one and the same space of time is the main task as its resolution would help to overcome the crisis in development of the global society.

Furthermore, if, together with proliferation of ICT, material production continues to be oriented to satisfaction of needs of an abstract consumer, it will be the ever more difficult to reconcile interests of manufacturers and consumers in time and space, and hence, inevitably, accelerated depletion of all kinds of resources and the even sharper societal stratification between the poor and rich. The UN Millennium Declaration not unreasonably states that the current unsustainable models of production and consumption must be changed in the interests of our common well-being - or, by my theory, in the interests of each human individual.

The most important conclusion of the new methodology is that the currently existing model of human community development has exhausted itself entirely, while the required model of the future has been outlined clearly.

The new methodological approach to identification of regularities in the societal system development invites the conclusion that the required model for socio-economic, political, organizational and science-tech development of human community is the model, in which the time between arising and satisfaction of a need of a specific human individual and the whole society would reduce continuously and gravitate to zero. Thus, as if from the future, we could have an integral vision of the mankind's development, look at the present or return to the past, and only take those elements from there that would provide continuous evolution towards the objective.

The required model implies to introduce, by means of local ICT, a specific human individual into the interconnection of production and consumption, to customize production of material and spiritual goods as ordered by a specific consumer and without producing anything extra, and to launch the mechanism that would reconcile interests of producers and consumers of the whole aggregate of goods in space and in time. As shown by the studies in the context of the new cognition methodology, such approach would be the basis of the new philosophy of forming the global community, the only possible way to get out from the cross-civilization deadlock and to overcome the crises with such implication as inevitably arising totalitarian regimes, and the only method to overcome troubles of mankind and to secure its spiritual awakening.

The only mode to realize all those tasks is to form market relations - not simply market relations as such, but most highly developed market relations. This means that relations among all market actors would be built on contract basis, and personal needs (demand) would be satisfied under individual order and through customized production, while a new special product - that is, information - would also become a commodity. In order to proceed to such kind of market, the society must form the respective forces, mechanism for conciliation of interests, and socio-political structures, and all that must be in full unity and interaction.

The further, like the past, orientation of production to satisfaction of abstract users' needs would result in accelerated destruction of all kinds of resources, as well as in more chaos, uncontrollable growth of prices and reduction of production output measured in natural units, in most acute crisis situations, international and interpersonal tensions and other negative (or, rather, catastrophe-provoking) phenomena.

Negative consequences of market relations can be eliminated or, rather, prevented through conciliation of economic and social interests of humans as producers as well as consumers of end products.

Mechanism for conciliation of interests shall be formed through the mechanism of interconnection between production and consumption, through the system for satisfaction of personal needs (demand) by means of the market, but, however, on the basis of individual order and customized (targeted) production.

The problem of targeted production, like the problem of exchange to be regulated on the basis of interconnection with each specific human individual through his / her individual order can be resolved, as evidenced by the world experience, only with use of most advanced achievements of science and technology, information and communication technologies and internet, with throughout proliferation of contract relations in the economic, social and political spheres; with development of industrial and local governance and with development of equal access to satisfaction of needs.

Turning to experience of highly developed countries, we see that the above situations already were manifested there as an objective reality rather than as some sporadic or casual phenomena.

For example, in the US of the 1970s, rivalry of monopolies gravely aggravated, while the processes of capital concentration and centralization became much more intensive. The subsequent studies of production and circulation of commodities were integrated within one organization. Meanwhile, market contacts were being replaced by direct ties within companies or groups of companies. Enlargement of production in the spheres of industry and trade, plus integration of the latter two reflected an intention to expand the limited potentials of the market mechanism. Thus it was made possible to provide the necessary level of cooperation between the related links of reproduction process, to attain stable supplies of commodities, to respond to changing demand more efficiently, and, finally, to secure capital investments in trade enterprises against elemental market fluctuations, and to generate additional profits by introduction of the latest achievements of management science and advanced technologies. Standing as a united front, trade and industry were able to resolve problems that could not be addressed by isolated agents of reproduction process, however big economic resources were concentrated in their hands. The advantages also included the possibility to coordinate plans for production output and product realization through precise account needs in the link of circulation, because industrial company received the «first-hand» information on dynamics of demand. Such

management of production and circulation helped to set and solve the task to minimize aggregate transaction costs, to attain the most optimal distribution of functions among different institutions forming the channel for trade, and to rationally place the industries.

The level of socialization was growing not only and not so much through concentration and centralization of capital within one organization (as the latter trend generated appearance of monopolies and, as a result, negative trends), but also through development of contract relations. In other words, production relations between the grass-root actors of developed capitalist economy - corporations, medium-size and smaller businesses - were difficult to describe in market categories. In Western academic definitions of the most important feature of that economy, the most often used terms were «contract» or «organized», while the term «market» was preserved.

The main principle of the Western market in those years was the following: a potential manufacturer first found a buyer of the products, which the given manufacturer could and was ready to produce, and only then, after the respective necessary preparations, started the production. That principle was diametrically opposite to the principle of archaic fair-market: you first produce, and then look for a buyer. Almost every purchase-and-sale deal between corporations was preceded by a written or verbal contract that was enforceable. Thus the contracting parties undertook mutual commitments to fulfill the contract terms and conditions, and any breach thereof could ensue the court sanctions.

The process of transforming the elemental market relations between manufacturers and customers into the planned market ones made progress in the 1970s - 1990s owing to computerization and automation of production and transition to flexible production systems. The earlier incredible hybrid was in the making: standard mass production, in which each product was made under individual order.

Thus, reproduction was accelerated and made more efficient, and time for commodity circulation was reduced owing not only to the higher level of socialization, but also to introduction of a specific consumer of interim and end products into the system of relations.

The trends in development of Western economy show amply that the market relations undergo different stages in the course of their evolution - from the low level of archaic, free and unpredictable relations through the highest level of organized direct ties, and logistic systems with precisely known result. All links of the chain are tied up by the contract. Moreover, in the contract economy, when commodities are manufactured under the consumer's order, it is not the

manufactured product that becomes a subject of purchase and sale, but rather a special commodity - information, as the contemporary capitalist market is based on the global information and telecommunication network and Internet.

The effect of direct ties between production links and humans may be only reached if they are set at the local level and through local government bodies. That is, an associated producer, who is absolutely free and independent, must be confronted with an associated consumer, because the very fact of confrontation between the interests of counteragents from the two economic camps of production and consumption would produce the desired effect.

Therefore, in order to form an efficient mechanism for interconnection between production and consumption or a mechanism for conciliation of human interests and satisfaction of human needs it will be necessary to waive conciliation of interests through a higher-level center. Only those issues shall be delegated to the higher level, which cannot be agreed upon at the local level.

Contract relations between economic actors and population are build on voluntary and economic bases, and the contact is not rigid or infinitely set for the contracting parties. Contracts can be made and upon fulfillment be terminated, and then made again by a different combination of parties. The number of combinations, like creativity, is indefinite. Whether producers remain with idle production facilities, or consumers do not have a chance to satisfy their needs - such prospects serve an effective impulse for all of them to keep looking for and finding, in time and space, a means to conciliate their interests. Each of them would coordinate his / her interests with interests of others in order to attain the proper quality and standard of his / her own living safely, freely and comfortably, with mature democracy and developed civil society. It seems that exactly such life for the people of Russia is described in the Presidential Message of 2006.

The main principle to form such relations does not imply a phased approach, but rather a systemic, comprehensive and synchronized (in time and space) approach in building political, economic, social, institutional, organizational and science-tech structures and rules for human communication based development and realization of a comprehensive target program, the contents of which would open a broad vista for creative self-realization of people.

All material prerequisites for transition to such relations are already available on the planet. The resources becoming available should be channeled so that to overcome uneven development, to introduce information technologies including Internet in the life of different social strata, and on this basis to eliminate inequality in economic, social as well as the science-tech development and then, finally, to eliminate poverty (the only real way to realize «Millennia Development

Objectives\*). This would lead to synchronization of all factors involved in production, distribution, exchange and consumption - similar to the current case, in which synchronization of manufacturers' work with suppliers and customers has become the most important index of efficient operation of companies that apply Internet and logistic systems. The time between arising and satisfaction of a need (with infinite variety of needs) for every specific individual will be equalized, reduce synchronously, and gradually the entire human community would find itself in one and the same real rather virtual space of time - in the space of dialogue, cooperation and security.

Processes of globalization must be balanced by process of individualization. Hence, the process of globalization is just a moment in the history of human community development. As soon as it starts, the globalization would begin neglect itself.

It is only a specific individual (but not a socio-economic model, territory, nation, state, superpower, civilization, etc.) that can be autonomous, self-sufficient and self-identical.

For example, 15 years ago many teenagers of the Celestial got a chance to receive education in the West. Later on, the government of China called them back home and promised beneficial loans to purchase housing and start business... While those young people did not change their Asian race, they returned home with an entirely different, European mentality. All in all, 15 thousand of those young people launched their business - high-tech business - throughout China. This case serves an example of entirely new quality of life. But, as we found out already, the current boom of information technologies will bring high dividends for everyone, if these technologies develop with the relevant socio-political and economic institutions, if the interests-conciliation mechanism is activated for everyone, if a specific human individual becomes the objective of the further development, and if the entire different-level community is concentrated gradually in one and the same space of time.

Optimization of relations with an individual through interconnection with public production, established at the local level with regard to manufacturing of material and spiritual goods as well as with regard to their consumption, would produce a sum of optimal relations. The maximal number of problems would be resolved at the local level, and only the minimum of those problems would be delegated to the regional, national, civilization-related and global levels that at the given time cannot be resolved at the local level. In other words, the principle of governance and local governance by deviations shall be realized. This will not be just an arithmetical sum - each time, this will be a new status in societal development.

As the time between arising and satisfaction of a need for each human individual would reduce, the diversity of the given individual's needs would grow. Some needs would disappear, while others would appear in conformity with the pace of time, and accompanied by strive to minimize the latter. As a result, human individual would be liberated from the slavery of consumption and proceed to the freedom of choosing his / her needs. In turn, freedom and equal access to material goods in all their diversity as well as continuous conciliation of manufacturers' and consumers' interests through the sphere of information is seen as a precondition for liberation and emancipation of human consciousness, enhancement of its level, and transition to satisfaction and growth of spiritual needs that would as well be marked by infinite diversity. The human system, self-transforming and self-organizing towards realization of its development objective, would acquire the ever higher level of organization, harmonization and solidity, and the interests of all people would be the ever more coordinated in time. Mankind would find itself in the space of mutual love. And again, the basic need of a human individual at the stage of the supreme form of development, like at the moment of its conception, would be the need to perceive himself / herself in full measure as a Human Being, and to develop his human «I am» and his spirituality. Only such society, the model of which is in the essence human-centric, can be discussed as developing in the short-, mid- and long-term perspectives with due regard of its development regularities and in full harmony with bio-social nature of humans.

If sorting out of different models for development of human relations is procrastinated, and if some elements of the system do not reach mutual relevance before all vital non-renewable resources are exhausted and renewable ones are not activated, the planetary-scale catastrophe will be inevitable.

Today, many organizations conduct R & D for building the information society for all, or possibilities for all<sup>1</sup>, or for development of long-term forecasts of innovative-tech development, etc., but all this is being done without regard of specific individual's interests, without understanding of the fact that only a specific human individual and attainment thereby of supreme reason are the objective of development. And if Russia, possessing such stock of knowledge, pioneers on such road, then it will transform itself from a raw-resource power into a highly intellectual and

<sup>1</sup> Fair Globalization: Building Opportunities for Everybody. Report by the World Committee for Social Aspects of Globalization. Switzerland: International Labor Organization, 2004.

highly spiritual power, and will pave the way to long-term, efficient and sustainable for itself as well as for the whole mankind. This, probably, is a historical mission of Russia!

All prerequisites are already available on the planet to realize the given development model. The mechanism for conciliation of interests between the human producer of goods and human consumer is result of creative alliance among the specific human individual, government authorities, business, science, local government and civil society. Why civil society? Because civil society is the aggregate of all formal and informal organizations and rules, which link a human individual (family, household) with the state (government) and business (private economic sector). This is a social contract in the sense that the given connection of a human individual with the state and economy is realized through specific institutions. If this is a horizontal form of a public contract with the government and business, as well as - proceeding from out new methodological approach - a contract with a specific individual at the local level, then such civil society will be strong and capable of resolving its problems.

Today the world, although slowly, is moving to formation of horizontal patterns of public contract or social contract. However, a specific human individual is missing in the methodologies being applied in the given proves. Turning to the case of Singapore, as described by researchers, we read that Singapore applied the social contract methodology created in the 1980s by John Roll. That methodology makes it possible not to address the group interests or, even more so, a human individual, but rather to simulate - that is, to imagine a response of some or another group to some or another offered measure. Singapore built several simulation-based programs of social contracts, but so far they did not work. As found out, the professor, representing the middle class, does not precisely simulate the views of semiliterate 15 year-old teenager from a difficult family. Therefore, some countries chose to apply the real model of social contracts, signed between the real interest groups - that is, the state, business and civil society, and thus made a breakthrough in their development. A case in point is served by Ireland with its impressive leap forward in the last 10 years. These cases are nearer to the required human community development model received in the context of the new cognition methodology, but so far they miss a specific human individual with his / her specific needs.

For the time being, various countries practice the prevailing vertical form of public contract, which means that a human person may not resolve its problem with the next-door neighbor, but must reconcile his and other persons' interests through the government institutions. (It appears about the

same as having to request the presidential permission to repair a water-pipe in one's own home). The other side of such relations, if seen through the prism of the new cognition methodology, is that in case the human interests are not reconciled in proper time, they would generate new troubles. The dominating pattern shall shift to the redistributive or the so-called rent-oriented behavior - that is, the willingness to redistribute rather than to create incomes and real products, which is the worst context for economic growth.

The role of civil society in resolution of various problems of human life is growing, but as long as this growth takes place only within the framework of its integration into vertical and even supra-state structures, without modification of the community development model, it would not bring positive results. An ample case in point: on the eve of the 60th session of UN General Assembly, the Summit-2005 took place in New York on September 7-9, 2005. It focused on the conference, which discussed the civil society's position in such issues as peace and security, human rights, and UN reform. The conference even had its interactive website, through which over 2000 non-government organizations (NGOs) and other partners from civil societies of over 80 countries expressed their views on the Millennium Development Objectives. Socially active citizens and public activists from many countries of the world could as well discuss the issues outlined in the report by the UN Secretary-General. That online discussion forum set forth a large number of issues grouped in topical categories, such as: elimination of poverty; development problems; freedom of living in proper human conditions; human rights and rule of law; consolidation of the UN as well as role of civil society in the UN. As shown by results of that summit and the 60th General Assembly, no new approaches appeared in resolution of these problems. Participants of discussion addressed innovative mechanisms for development funding oriented to introduction of various taxation structures; were agreeing on donors' firm commitments with regard to the volumes of official aid for development and schedules for attainment of target indices; raised questions on signing of new reserve agreements with national and regional suppliers of humanitarian services, etc. All those new options of redistribution, combined with vertical contract with civil society and preservation of the current development model appear to be the worst scenario. Mass media not unreasonably note that the future of the UN and reform of the UN Security Council could not be discussed productively. These issues turned out to be so difficult that the world leaders chose not to make haste with the reform of the number one international organization.

Transformation of the UN - the institute for conciliation of the mankind's interests at the global level - is an issue of paramount importance, especially

in the light of the fact that most of the UN member states cannot provide minimal conditions for economic and social development on their respective territories. In terms of the new cognition methodology, this means that the time between appearance and satisfaction of the need in even the most staple foods, clothes, housing, education, etc., is infinitely long for population of such states. Hence, the reverse connection through the consciousness of their people is such that generates their low-frequency emotion of aggression and fear, as well as passive and higgledy-piggledy thinking, all of which, being accumulated in the environment and inner cavities of the Earth, would reach the critical values and then cause the planet disturbance in form of earthquakes and other natural disasters. Physicists proved that seismic frequencies and negative human emotions are placed in one and the same frequency diapason from 0.7 to 100 Hertz. What is absolutely clear, the UN activity no longer satisfies the global community requirements and may be reformed or transformed into a «World-Wide Coalition Government» or another institution. It is no less clear that if all such transformation takes place within the framework of the currently existing model of human community's development, it will result in the worst option of development with catastrophic consequences. The key to the philosophy for formation of global society and all its institutions is seen in the thesis: «All inhabitants of the Universe are of the common origin; all people have one and the same human nature, and the entire global community as well as each specific human individual have the single shared objective - in their development, to attain the Supreme Reason». The main task of the UN or any other institution to be built on its basis is to contain a structure that would start accumulating all knowledge from conception of the mankind through to our days. From such bank of science-tech information, it will be possible to receive any knowledge in order to arrange technological chains in any corner of the planet that would link the arising and satisfaction of a specific human individual and thus provide for the growing synchronization of all processes in the space that would continuously reduce in time. The missing knowledge is an order for new R & D, experimental works and designs.

A noteworthy point is that the system of human relations oriented to development of a specific human individual, and to continuous reduction of time in reaching thereby of the Supreme Reason is an open system. Realization of such system would resolve automatically all other problems - such as the problem of sustainable development with conservation of resources and elimination of poverty, fear of future and all other troubles; building of information-based and civil society and realization of the idea of horizontal public contract; liquidation of the institute of wealth redistribution,

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and, what is most important - evolutionary enhancement of the level of human consciousness, and hence eradication of the sources of terrorism as well as man-made and natural catastrophes.

Will such future come for the global world and for each human individual? In my view, it will, because otherwise the mankind will disappear. The current situation is just as described by Marx - the majority of impoverished population of the planet is approaching the critical mass. While science-tech achievements are in irreconcilable contradiction with current model of human community development. But, however, to build the desired future is the task of all people on the planet and each human individual, while scholars and scientists must help in understanding this task and to provide their attainments for its realization.

To conclude, it seems worth to note the following. Academician T. I. Oizerman correctly argues that the future cannot be foreseen, predicted, anticipated, second-guessed, or forecasted. The more so, the future cannot be planned, programmed, projected and invented. Various forecast scenarios may have different titles (continuous growth; sustained rates; rate reduction; mixed, optimistic, pessimistic; market-inertial; humanistic-noosphered; extrapolated; normative, or any other), but if they are drawn in relation to the currently existing development model, their credibility will be quite weak. N.D. Kondratieff was correct, when he stated that a plan of society development without any prevision means nothing. However, the plans for future development should not be connected with the past knowledge, but rather with the targeted programs of realization, because the new methodology for cognition of regularities in development of human community suggests that the distant future cannot be forecasted, but it must be known. Or, in other terms, we may say that «Future can only be forecasted from future»!

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