

A. A. Akayev<sup>1</sup>

## THE WORLD OF CIVILIZATIONS – 2100. SIX POSTULATES OF PREDICTABILITY AND MANAGEABILITY

The conviction in unpredictability and unmanageability of the future society's development has widely spread in the recent decade. This is brought about by the chaotic character of the world development in the global crisis environment, as well as the fact that the now predominant industrial paradigm of social science has become old to a considerable extent and does not reflect radical changes in the structure and dynamics of the today's society. The idea of unpredictability and unmanageability justifies mistakes in numerous long-term forecasts and strategic helplessness of authorities at the international and national levels.

However, such idea is deeply wrong. Radical transformations witnessed over the world are in conformity with laws and are predictable. They can and should be exerted influence on basing on the new paradigm of social science, answering the realities of the 21st century. The cornerstones of this paradigm were laid by the great thinkers of the 20th century – Pitirim Sorokin and Nikolay Kondratyev, Vladimir Vernadsky and Nikita Moiseev, Joseph Schumpeter and Fernand Braudel, Vasily Leontyev and Alvin Toffler. The modern Russian academic schools (civilization, Russian cyclicalism, noosphere, global modeling and forecasting technological and economic patterns, as well as social and demographic, etc.) that perceived and synthesized this academic heritage, laid the foundations of the new integral paradigm of social science and interaction of the society and nature serving as an important prerequisite for reliable forecasting and long-term strategic planning [5].

Long-term sustainable development strategies have been worked out based on this paradigm and presented to the United Nations and other international organizations. They were based on partnership of civilizations, overcoming the civilization crisis and taking the trajectory of global sustainable development, establishment of multipolar world order based on partnership of civilizations [1].

The following six postulates originating out of the mentioned paradigm can be worded. They determine predictability and manageability of civilizations for the period until the end of the 21st century [2].

*Civilization cycles.* The world of civilizations uniting various local civilizations in the global one and the world

civilizations as historical eras of global civilizations develop according to the governing laws of cyclical dynamics. There are super-long cycles of world civilizations' change and replacement observed over the 10 millennia of transfer to civilization development of the humanity: neolithic, early-hierarchical (early class society), antique, medieval, early-industrial and late-industrial world civilizations. Four generations changed over the 5 millennia of local civilizations existence, at the same time the law of historical time compression is in force: the length of super-long civilization cycles reduced from several millennia in the era of ancient civilizations down to several centuries in the second half of the II millennium A.D.

In the end of the 20th century, the humanity entered the era of the industrial and technological world civilization's completion, the 4th generation of local civilizations and establishment of the integral humanistic civilization and the 5th generation of local civilizations that will be predominant in the second half of the 21st century.

The main contours of the new historical era are determined in the works of the leaders of the modern civilization school.

*Civilization crises.* The change of super-long civilization cycles is accompanied by long-drawn-out and deep civilization crises, intensification of chaos and turbulence in the global dynamics, aggravation of political contradictions. However, according to the definition of the Noble Prize winner Ilya Prigogine, the foundations of another historical era of civilization dynamics are laid in this chaos, a new world order is being born [4].

The world entered exactly the same civilization crisis in the end of the 20th century, and that was expressed with slowing the economic growth down, exacerbation of periodical economic crises, depopulation's spreading, decrease of rates of labour efficiency growth, widening gap between richness and poverty, energetic, environmental and geopolitical crises, terrorism and wars spreading. At the same time, the circle of countries, in which the foundations of integral humanistic and noospheric civilizations are laid, is widening. It can be expected, that starting from the second quarter of the 21st century, the civilization crisis will be in the process of overcoming, and the new world civilization will be predominant in the most developed countries in the middle of the century.

*Civilization sociogenetics.* The process of transformation of the six components of the civilization genotype (civilization code) takes place simultaneously – environmental and sociodemographic, technological and economic, sociocultural and geopolitical. The processes of establishing the noospheric energy efficient and environmentally friendly way of production and consumption, socially beneficial and community-focused production are developing, accompanied by moderate population growth, formation of the scientific and technological revolution of the 21st century, formation of the integral economic system – social-noospheric and innovation-focused establishment of integral social and cultural system, as well as sustainable

<sup>1</sup> President of the Kyrgyz Republic (1990–2005), president of the Academy of Sciences of the Kyrgyz Republic (1988–1990). Senior Research Fellow of the Institute for Complex Systems Mathematical Research under Lomonosov Moscow State University (since 2005), a foreign member of the RAS, academician of the Academy of Sciences of the Kyrgyz Republic, Dr. Sc. (Engineering), Professor. Academic supervisor of Centre of Fundamental Studies at Saint Petersburg State University of Economics. Author of over 300 scientific works, inventions and academic publications on Applied Mathematics, Mathematical Economics, Optical Computers and Information Technology. His political and philosophical views are described in the selected papers: "The Difficult Road to Democracy: a Memorable Decade", "Transition Economy as Seen by the Eyes of a Physician", "The New Strategy of Vladimir V. Putin to Achieve High Steady Growth Rates of the Russian Economy", "Modelling and Forecasting World Dynamics" (co-author), "Complex Modeling and Forecasting of the Development of the BRICS Countries in the Context of the World Dynamics" (co-author), "Thinking about Future with Optimism: reflections on Foreign Policy and World Order" and others. Member of the New York Academy of Sciences. He is awarded with the order "Badge of Honour" and Pushkin Medal. Laureate of N. Kondratyev golden medal, S. Kuznets golden medal, V. Leontiev golden medal, and Vernadsky golden medal and order.

multipolar world order based on dialogue and partnership of civilizations.

The main contours of the new genotype are becoming more and more evident in the forefront, rising civilizations. At the same time, signs of decay and decomposition of the departing industrial and capitalist era are more and more clearly manifested in descending civilizations.

*World leaders change.* The dynamics of the world of civilizations is characterized by periodical oscillations of the historical pendulum, change of the world leaders. If Eastern civilizations were leaders in the Middle Ages (Chinese, Indian, Moslem), in the early modern period, especially during the industrial civilization era, leadership passed over to the West European civilization and, starting from the second half of the 20th century, to the North American civilization. The Japanese and Eurasian (the USSR) civilizations were also among the leaders. However, the shift of the center of civilizations' creative activities to the East forecasted by Pitirim Sorokin and Arnold Toynbee has been observed since the end of the 20th century. The Chinese and Indian civilizations are becoming world leaders. The North American civilization's attempt to secure its dominance and establish the unipolar world order in the 21st century collapsed. The Eurasian civilization experienced another catastrophe and is starting to revive, establishing its leadership in building the multipolar world order. At the same time, the risk of suicidal clash of civilizations using nuclear weapons has grown. This makes transfer to the multipolar world order essential based on dialogue and partnership of civilizations. In this case, interlinking of the two mega-projects implemented in Big Eurasia are of decisive importance: Big Eurasian Partnership – Russia's initiative and the Chinese One Belt – One Road initiative.

*Noosphere establishment and formation of the integrated paradigm of social science.* Civilization crisis overcoming and establishment of the integral humanistic noospheric civilization is a new stage of noosphere establishment, which is brought about by development and effective implementation in practice of achievements of the scientific revolution of the 21st century, as well as active use of its results by power structures at the national and global levels. It will be required to overcome the contemporary crisis of science for that, as well as provide outrunning rates of its development and overcome the existing gap between power and science. The approved strategic decisions should be based on scientific achievements and subjected to scientific expert examination.

At the same time, the special feature of the scientific revolution specified by Thomas Kuhn should be taken into account: a new scientific paradigm is born beyond global science [3]. The leaders of the contemporary scientific revolution in social science are social academies of sciences and scientific organizations. The new paradigm of social science in Russia is worked out by academic schools, united departments for research of cycles and forecasting from the Russian Academy of Natural Sciences and departments of the International Academy of Global Research jointly with scholars of the Lomonosov Moscow State University. A strong intellectual center was set up, civilization and Eurasian forums, cross-disciplinary discussions are regularly held, academic journals *The Partnership of Civilizations* and *Strategic Priorities* are published. There is a network

of websites, where fruitful relations with foreign scholars are established. Thus, the foundations of the scientific platform for overcoming the civilization crisis and establishing the humanistic noospheric civilization, enhancement of predictability and manageability of future development have been actually formed.

*Succession of generations and synthesis of scientific and educational, and digital revolutions of the 21st century.* The world of civilizations is transformed on the basis of the law on succession of generations. The leading generations change every thirty years. A new generation perceives the heritage accumulated by the proceeding generations, adapts it to the new conditions of development and realizes within the period of its creative activities. Currently, the period of the 1990s generation's leadership is ending and there is the transfer to the 2020s generation's leadership going on. This generation is exposed to the high unemployment global crisis and ready for radical changes. However, representatives of this generation do not understand the essence of the current changes, contents of the crisis and ways of its overcoming, it is not armed with clear ideals of the future society. The existing system of education considerably lost its fundamental character and creativity, knowledge obtained using the Internet is to a considerable extent distorted and disorients the new generation. Because of that, the contemporary revolution in education and its synthesis with scientific and digital revolutions of the 21st century are of great importance for establishment of the foundations of the humanistic noospheric civilization.

The main directions of education's transformation are increase of its fundamental character and creativity, as well as continuity and use of modern digital technologies for spreading new knowledge, realizing a new paradigm. The international digital civilization education program developed by the Pitirim Sorokin and Nikolay Kondratyev International Institute is particularly focused on that, as well as setting up the open university of the dialogue of civilizations, publishing a textbook series for it and issue of the international scientific and educational journal "The Partnership of Civilizations". The course of lectures "The Dialogue and Partnership of Civilizations" based on the textbook with S.V. Lavrov's preface was presented at the global processes faculty at the Lomonosov Moscow State University. Humanitarian filling of information networks lies ahead for forming the new generations' worldview in the spirit of perception of their own civilization heritage, dialogue and partnership of civilizations.

Thus, the original basis for enhancement of predictability and manageability of the civilization development and transfer to a new historical era is currently being formed exactly in Russia, which is in the epicenter of the modern civilization crisis and at the same time has powerful academic traditions. It is required for this platform to be perceived and supported by power structures.

## References

1. Akayev A. A. The Prospects of Establishing the Sustainable Multipolar World Order Based on Partnership of Civilizations / A. A. Akayev, Yu.V. Yakovets. – Moscow : MISK, 2016.
2. Akayev A. A. The World of Civilizations –2100: Integral Scientific Utopia. Dialogue of Three Generations / A. A. Akayev, Yu.V. Yakovets, A. G. Savoyesky. – Moscow : Progress, 2019.
3. Kuhn T. The Structure of Scientific Revolutions / T. Kuhn. – Moscow : AST, 2009.

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4. *Prigogine I.* Order out of Chaos. Man's New Dialogue with Nature / I. Prigogine, I. Stengers. – Moscow: Progress, 1986.

5. *Yakovets Yu. V.* The Leadership of Russian Scientists in Forming the Integral Paradigm of Social Science / Yu.V. Yakovets. – Moscow : MISK, 2018.