

Specifics of taking into account the nonlinear dynamics of world development in socio-political forecasts

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Abstract

The article is concerned with the study of the project of civilizational development of Ukraine in the context of modern social and political changes. Noticed that civilizational choice of Ukraine especially acute at the stage of transition of world society to the post-industrial phase of its development. Underscored that the roots of the Ukrainian ethnos lead to the Trypillia civilization and simultaneously the Ukrainian local civilization has the features of a border civilization.

The conducted research allows determining the civilization project of Ukraine at the present stage, which in a new way actualizes the importance of science.

It is proposed to start developing the foundations of uniting the people of Ukraine on the basis of the Code of Ethics, which should be based on the consistent ethical imperatives of the Ukrainian people on the basis of common humanistic values.

Key words: civilizational development, civilizational project, civilizational choice, moral and ethical core.

Introduction

The development of socio-political forecasts is one of the most important components of the professional activity of several interested state institutions of Ukraine.

Today, many scientists consider trends in socio-political processes and phenomena through the prism of uneven dynamics of social, economic and military-political processes.

Material and methods

Recent events, including the global economic crisis and pandemic, are relevant to global development research.

Thus, researcher (Voronkova T., 2020) linked the solution of aggregate contradictions in microeconomics through radical transformation of the basics of doing business, taking into account the state of macro- and microeconomic system, which will promote the system to the next state of equilibrium, which is a prerequisite for its future development.

Ukrainian researcher (Shavalyuk L., 2020) analyzes the dynamics of slowdown in world trade and industry.

Another Ukrainian researcher (Negoda T.,

2020) analyzes the world economic crisis of 1929-1933 and the wave of the global financial crisis in 2008, predicts the features of the economic crisis of 2020, associated with changing cycles, namely the fall of stock markets, commodity prices, currency collapse and courses, etc.

A Russian expert (Grigoriev L., 2020) studies the influence of cycles and crises on the course of human history.

It should be noted that since the end of the XX century there has been observed a growing interest in research on the uneven dynamics of socio-political processes.

The practice of taking into account the

uneven dynamics of the historical process in the analysis and forecasting of the international, political, geopolitical and military-political situation has been initiated by some scholars since ancient times.

Political science analysis of the current state of socio-political forecasting has shown that such factor as the uneven dynamics of social, economic, political processes is not fully taken into account in this area.

Results and discussion

The nonlinear model of historical events has its roots in the forms of perception of the world by primitive people, in particular the ancient agricultural perception of space in the form of concentric circles (like their settlements), which seemed to be the centers of the world and time as a cycle of seasonal changes.

The archetype of cyclicity was developed in the ancient philosophical tradition (Plato, Democritus, Heraclitus, Empedocles), which had been at that time much closer to science and to the accumulated empirical material.

It can be argued that the idea of cyclical socio-political processes permeates the religious and philosophical thought of the ancient world, whether it be the Indian concept of kalpa, the Chinese idea of the cycle of yin and yang or astral fatalism of the Pythagoreans and Stoics. Thus, the ancient Greek historian Polybius in the II century B.C. identified a cycle of six main phases in the change of political regimes: monarchy, tyranny, aristocracy, oligarchy, democracy, and ochlocracy. Despite the antiquity, this scheme still works.

These views coincide with the beliefs of Italian thinkers of the Renaissance, in particular M. Cusa, N. Machiavelli, J. Bruno, T. Campanella and especially with the innovative work of J. Vico. Developing the paradigm of cyclicity, J. Vico focused not on the analysis of changes in political forms, as the ancient Greek philosophers did, but on the study of cultural transformation.

In the XVI century the concept of cyclical political regimes was developed by the French historian L. Le Roy. The cyclical nature of natural and social phenomena has attracted the

At the same time, integral synchronization of heterogeneous cycles into a single prognostic model has not yet been performed. This indicates the need to study the achievements of scientists on the uneven dynamics of social, economic, political processes in order to take them into account in socio-political forecasts, both globally and around Ukraine.

attention of many philosophers and historians who sought to explore the order, rhythm of various processes, to identify patterns in the chaos of historical events. The most fundamental work, which can be considered a starting point in the study of the cyclical dynamics of any social processes, is a four-volume book by P. Sorokin (1993).

Plotinsky Y. (1993) in his monograph develops the views of P. Sorokin in accordance with the modern level of science. In particular, he developed an original classification of cyclical social processes types, in addition, he drew attention to the relationship between geopolitical processes and the military-political situation.

A peculiar approach to the ratio of natural and accidental is proposed by Lotman Y. and Petrov V. Based on the theory of synergetic, they identify two factors that complicate the predictability of historical processes: chance and conscious choice. The authors consider the social process as a multifactorial flow and argue that the course of social processes is influenced not only by accidental events (death of the leader, natural disasters, etc.). The model of advancement of science developed by Y. Lotman is confirmed by scientometric researches of other scientists who, analyzing development of symbolic logic, found rather steady cycles with the period in 12,5 years.

The well-known theorist of socioecogenesis V. Kuzmenko (1994) claims, that the mechanism of socioecogenesis has the character of periodic repetition of chronometrically marked periods. Each of these periods, reproducing some features of the past, carries innovations that

largely determine the future development of society. Geometrically, this process can be represented in the form of a cycloid. Since each such socio-economic cycle is qualitatively different from the previous one, in the bowels of which it originates, it can be reflected in a different spatial plane.

However, the achievements of M. Kondratiev (1990), who created the theory of economic cycles, are considered very important and are recognized worldwide.

Among other theoretical developments are the fundamental studies of Y. Sokolov (1994), V. Kuzmenko (1994), O. Subetto, and Y. Yakovets (2006) in the field of macro-forecasting of geopolitical processes taking into account nonlinear historical development. In addition, the work of B. Kuzyk reveals the main results of the study of civilization processes.

Noteworthy is the monograph by V. Pantin (2003), which reveals the problems of global history – a new direction of historical research, which has recently been developing intensively both abroad and in Ukraine.

Thus, V. Pantin proceeds from the fact that modern globalization is the result and a certain stage of long-term historical development. In his study, based on historical material, the hypothesis of nonlinear, cyclic-wave nature of historical processes, in particular the existence of global cycles of differentiation – integration, characteristic of antiquity, the Middle Ages and modern times, is considered and substantiated.

The popular science publication of E. Afonin, O. Bandurka and A. Martynov (2000) on the basis of empirical material shows the dynamic and cyclical development of the diverse world of objects and subjects of Great Human History, among which, according to a prominent sociologist of the twentieth century. P. Sorokin, the central figures are Human, Society and Civilization.

This idea was further developed in the monograph of E. Afonin and A. Martynov (2002), which presents in more detail the idea of the universality of the social development cycle. It should be noted that the general theory of the cycle was first formulated by the founder of the Stavropol International Conference “Cyclical

Processes in Nature and Society” Y. Sokolov (1994) in his publications in 1993-1996.

The original concept was proposed by J. Arrigi (2006), who identifies four age cycles of hegemony (long centuries), within which there are corresponding systemic cycles of capital accumulation. This approach allows us to reconstruct the political and economic mechanism of development of cycles of hegemony and its evolution.

The famous historian A. Toynbee (1990) came to the conclusion that in history since the XVI century, there is a 115-year cycle of war and peace.

One of the most popular explanations for the 50-year periodicity of large-scale and fierce military campaigns is related to the so-called two-generation hypothesis. Cycles of world politics are long cycles of world politics or “cycles of leadership” of American political scientists J. Modelski and W. Thompson (1992, p. 55).

With the change of such cycles, the geopolitical structure of the world (world order) periodically changes, new great powers enter the world arena, forming their own zones of influence. The duration of one long cycle of world politics is about 100 years.

Each cycle of world politics correlates with two consecutive cycles of world conjuncture M. Kondratiev (1990).

In this regard, the forecast of the American political scientist J. Goldstein (2005) can be called more pessimistic. According to him, the world war can be resolved by 2020. In his work, published in 2005, he outlined the concept of long waves generated by wars, their consequences and preparations for them.

In addition to the above-mentioned, there are other approaches to the study of cyclicity. For example, based on the study of material from various fields of knowledge, Professor Bauman, Moscow State Technical University Y. Abramov improved the original concept of geopolitical cycles of Yaksart, understanding them as periods of cultural, economic and military dominance of any state in the world. Given the rapid changes that took place in the late twentieth century, this concept, created in

the mid-70s of the twentieth century, should be considered outdated, in need of clarification (Demin, 2001).

Comparing the dynamics of GDP of the United States, China and Japan, it was possible to clarify the pattern of geopolitical waves, on the basis of which it can be argued that China will eventually overtake Japan and will strive for world hegemony in 2012-2030, as confirmed by modern analysts.

The relevance of the study of the cyclical nature of geopolitical changes and the need for their practical application proves open in the 20s of the twentieth century. M. Kondratiev regularity of the emergence of major military conflicts in the phases of the rise of the so-called "long waves" of 55-60-year cycles. It is with this phenomenon that many modern authors associate the 45-50-year periods of the great wars in Europe from the seventeenth to the first half of the twentieth century.

The study of long military cycles, as well as the evolution of large militaristic cycles, is of particular importance for assessing the development trends of politico-military situation and for predicting the occurrence of military conflicts. The amplitude of such military cycles is postulated by periods that far exceed human life expectancy.

The idea of the periodicity of changes in these cycles was expressed in 1942 by K. Wright. It was developed by V. Tsymbursky, who defined ultra-long military cycles (hereinafter – ULC), associated with the scale of military conflicts in Europe: depressive, associated with local military conflicts, and expansive – with large-scale military conflicts. Thus, the depressive cycle A – 1340-1494, the expansive cycle B – 1494-1648, the depressive ULC I – 1648-1792, the expansive ULC II – 1792-1945, the depressive ULC III – 1945-2100 (Tsymbursky, 1996).

Changes in the exacerbation or weakening of conflicts in Europe can be observed during each ULC. Thus, the first 60-80 years of expansive ULCs are characterized by intense international confrontation. The middle of the cycle is characterized by voltage relief. The internal structure of depressive cycles is somewhat

different. In them, the exacerbation of conflicts is manifested during 40-60 years of the middle of the cycle. They are preceded by the initial part – 50-70 years, for which establishes a "narrowed" vision of possible success and initially great military-political aspirations are exchanged for a series of local conflicts.

The relationship between the change of the ULC and the beginning of new epochs of international politics is quite simple: each cycle with its arrival approves new norms of military, in particular military-political game.

Proponents of the world-system approach, I. Wallerstein (1976), F. Brodel (2007) and other scholars believe that over the past 500 years, a broad economic system has formed - a holistic union of states without central political power. According to Wallerstein's theory, the countries that make up the world system are divided into central, semi-peripheral and peripheral. Central countries govern the peripheral, and there is a constant struggle between them for world leadership.

Uneven economic development, the emergence of new contenders for leadership in the world leads to an intensification of the struggle for resources, living space, markets, spheres of influence. Periodic destabilization of the system of international relations eventually ends in large-scale wars and a change of hegemon.

In the 70-80s of the XX century L. Gumilev (1990) developed a Passionarium theory of ethnogenesis, which allows, given the phases of civilization cycles, to predict complex political and military-political processes at the global, regional and subregional levels.

Somewhat different views on the dynamics of the interaction of civilizations are held by the American political scientist S. Huntington (1993), author of the theory of "Clash of Civilizations". He suggests that along with the ideological victory of the West in the late twentieth century deeper contradictions of a civilizational nature come to the fore.

The conflict of civilizations or civilizational identities will dominate in the world politics of the XXI century; it will replace the conflict of the rulers of the XI-XVII centuries, the nation-states

of the XXI-XIX centuries and the conflict of ideologies of the XX century. The content of the conflict of civilizations is as follows: the interaction between Western and non-Western civilizations and the latter among themselves. The peoples and governments of non-Western civilizations will no longer be exclusively objects of history, but together with the West will become the driving forces that determine it.

It should be noted that to date there is no synchronization of established cyclical patterns, as a model that could be used to assess and predict such complex systems as modern global

society, taking into account the nonlinear dynamics of socio-political and economic processes, which simultaneously combines mathematical-statistical methods, on the basis of which future trends are extrapolated, would increase the accuracy of forecasting.

Summarizing the above, it can be argued that the scheme of interaction of civilizational cycles and the algorithm of synchronization of heterogeneous cycles – economic, geopolitical and civilizational – refined on the basis of the latest scientific research will allow to develop more accurate socio-political forecast scenarios.

Conclusions

The uneven dynamics of the historical process is definitely the factor influencing the development of the global world. Political science analysis of many sources on the theory of uneven dynamics (cyclicity) of the historical process and the practice of its application showed that some scientific concepts are of great value for improving the scientific and methodological apparatus used in forecasting the international, political and military-political situation globally based on this theory.

The uneven dynamics of socio-political processes is due to the interaction of a conglomeration of cycles that set a certain periodicity, the rhythm of trends.

We believe that the most acceptable for assessing and forecasting trends in world development should be considered economic, geopolitical (cycles of hegemony), civilization and other cycles.

At the same time, to assess such a trend as the emergence of new and escalating military conflicts, we consider that knowledge of the dynamics of economic cycles makes it possible to predict the pattern in the form of a burst of military conflict on the rise of Kondratiev.

Also, the ultra-long military cycles (ULC) are associated with determining the scale of military conflicts: depressive, associated with local military conflicts, and expansive – with large-scale military conflicts. During the operation of each ULC, there may be changes in the tendency for military and political situation to worsen or weaken.

It is believed that the first 60-80 years in the expansive ULC are characterized by intense international confrontation. The middle of the cycle is characterized by a weakening of military and political situation.

Thus, taking into account the ULC makes it possible to assess and predict the frequency of changes in the scale of military conflicts, as well as periods of escalation of conflicts at the global and regional levels.

Taking into account the cycles of hegemony (ultra-long political cycles) allows us to determine the approximate periods of intensification of the struggle in the political and economic spheres between the centers of military and political forces for markets, strategic resources and leadership in peripheral countries.

Adjusted and updated data on the phases of civilization cycles can be used to identify trends such as competition for redistribution of spheres of influence between the world's leading military and political forces in the post-Soviet space and the intensification of the struggle for energy and natural resources.

The aggregate synchronized scheme of interaction of the above-mentioned cycles will serve as additional information material for more accurate socio-political forecasting both at the global and regional levels.

Its application will allow determining other trends in world development, in particular to determine the approximate periods of intensification of the struggle in the political and

economic spheres between the centers of military and political forces for markets, strategic resources and leadership in peripheral countries, as well as probable contenders for world geopolitical hegemony and the approximate timing of their rise and fall; periods of escalation of ethno-confessional conflicts at the global and regional levels; tendencies towards escalation of the domestic or foreign policy situation.

Prospects for further research

1. Political substantiation of the algorithm of socio-political forecasting on the basis of the

theory of uneven dynamics (cyclicity) of the world process.

2. Development of a model and improvement of methods for forecasting the socio-political situation, taking into account the uneven dynamics (cyclicity) of the world process.

3. Producing the forecast scenarios on the basis of the improved methodology of world development at the global, regional and subregional levels in the context of the direction of their impact on the national security of Ukraine.

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