

Reimagining our world: from Fernan Braudel to world-system analysis and from historical globalization to the GDELT Project

Pertsev Dmitry Michailovich

*Candidate of Historical Sciences, Junior Research Fellow
Institute of History, Archeology and Ethnography
of the Far Eastern Branch of the Russian Academy of Sciences
North Pacific Anthropology Laboratory*

Abstract. Modern Russian social science is in crisis because it is fragmented and highly specialized. Today, knowledge, split into many disciplines not related to each other, generates a flow of poorly integrated information. Such dismemberment is a brake on the process of integrating social science disciplines into a single whole, since all of them, for the most part, explore a common object - the evolution of societies at different periods of world history. World-system approach, big data and the concept of historical global adaptation by actual paradigms capable of combining a set of elements into an integral and general picture of the development of societies of various levels of complexity within the framework of the general movement of historical evolution from primitiveness to modern times.

Keywords: macroevolution, crisis of history, globalization, world history, world-system, historical globalization, Wallerstein, long time, national state, regions-economics, GDELT

Introduction

Social science in Russia is increasingly fragmented. In other words, we know more and more about less. Since the days of F. Braudel and I. Wallerstein, who tried to process the growing volume of new data, the situation has worsened, giving rise to an even greater flow of information on world problems. The proliferation of ridiculously narrow studies in sociology, political science, and history in Russia has led to a situation where the analysis of the evolution of human communities has overshadowed the description of the little things. For global generalizations accumulated by «scientists-ants» an approach is needed that brings together the results of their research. In the current conditions, it can be world-systems analysis, historical globalization and work with big data through the GDELT Project.

In other words, world-systems analysis, although it certainly needs some kind of reformation, is suitable for describing modernity, and historical globalization, perhaps, at least somehow unifies the data on precapitalist civilizations.

Before I. Wallerstein: F. Braudels world

The vague outlines of what in the 1970s I. Wallerstein would call world-systems analysis can already be traced in the studies of F. Braudel in the 1940-1950s of the XX century. History was studied from a positivist standpoint, and the scientist's professional craft consisted in masterly mastering dead languages, reading written sources and working on miniature, usually political topics without intruding on related disciplines. It was a descriptive story-story, whose adherents only meticulously reconstructed a chain of chronological events.

Initially, F. Braudel himself taught in the spirit of positivism, however, a ten-year stay in Algeria allowed him to see his native France «inside out» look at it from the opposite side of the Mediterranean Sea. He suddenly felt, and then became convinced in practice, that the history of his country is only a part of more global world processes. F. Braudel once confessed «I think that these pictures, this Mediterranean, as if seen «from the other side», had a great influence on my historical views» (Braudel, 1982). Fascinated by the Mediterranean, he chose the XVI century analysis of this particular region as the topic of his dissertation.

Returning home in 1932, F. Braudel taught at the Lyceum Condorcet, but two years later he was offered a place at the University of Sao Paulo and he left for Brazil. If Algeria forced him to think in world categories of historical time, then in Brazil F. Braudel faced the coexistence of multi-structure: European culture, «introduced» by the Spaniards and the Portuguese, coexisted here with the local Indian. It was through this motley interdependence of peoples that the historian saw the coexistence of different civilizations and the process of their influence on each other - a problem that eventually took a primary place in his research. «It was Brazil that allowed me to arrive at a concept of history that I would not have had if I had stayed within the Mediterranean» (Braudel, 1982).

Arriving in France, F. Braudel in the summer of 1939 year and began to write a dissertation on the Mediterranean era of Philip II. He did not work for a long time, the war began and he was drafted to the front. A year later, F. Braudel was captured and sent to a camp in Mainz. In captivity, he continued to work and, more importantly, it was at this time that his approach to history was finally formed, where «the fate of mankind is decided on a much deeper level. To choose a long-term scale for observation means to be, as it were, in the place of God the Father and to find refuge there» (Braudel, 1982). Such globalism, the broadest erudition and contempt for event history, henceforth, will become a key feature of F. Braudel's works.

After his release from captivity, he, having finalized the dissertation, presented it to the members of the Academic Council of the Sorbonne, who eventually awarded him the degrees of Doctor of Humanities. The study of the Mediterranean thus revolutionized the historical science of the time. Fundamentally new ideas of F. Braudel were: 1) the concept of historical duration *la longue duree*; 2) a call for the integration of the social sciences; 3) introduction of the concept of «world-economy» (*economie-monde*).

The concept of time, or temporality, is one of the most important components of F. Braudel's approach to history. What is *longue duree*? The fact is that F. Braudel considered the event history to be dust, foam on water, hiding deeper structures. Some of them, for example, geography, climate, geology, changed, in his opinion, slowly, and their restructuring did take centuries. These structures are inactive. In other words, *longue duree* is a time of long duration, when there is a slow transformation of the environment (Braudel, 1958; Blim, Coffi, 2014; Lee, 2018). Along with fading history, F. Braudel distinguished *moyen duree* - conjunctural time, lasting decades and hundreds of years. This includes economic and social change. The last time, according to F. Braudel, is *eventful time* (*courte duree*). This is the time of a diplomat and a politician, lasting from several years to several days - a kind of moment. F. Braudel, although he gave priority to a long time, forming the geographical and social space of human history, nevertheless, he called for taking into account all three temporal forms when analyzing the past.

F. Braudel's approach destroyed all sorts of frameworks separating the human sciences from each other. Interdisciplinarity helped him combine the achievements of each of the disparate disciplines for a more complete description of world development. This idea, like the concept of *longue duree*, will later be modified by I. Wallerstein in relation to capitalist *economie-monde*.

In fact, F. Braudel already laid some foundations of the world-systems analysis, which was a negative reaction to the outdated organization of knowledge of the XIX century, whose reflections, to one degree or another, are inherent in the science of the XX century, when history was in charge of the past, and economists (the market) mastered the present, political scientists (state) and sociologists (civil society). Studies outside the Western world have been monopolized by anthropology and orientalism.

Modernization Theory

Until 1945 year, such a paradigm, based on highly specialized and fragmented disciplines, was justified and the researchers did not touch on related problems, however, due to the change in the post-war geopolitical situation, the growth of the number of universities and the accumulation of scientific information, a different approach was needed. In an increasingly complex and interdependent world, the division of knowledge into industries did not justify itself. So, thanks to new research, a paradigm shift took place, when, in the 1960s, scientists began to revise the mechanistic model of the universe by I. Newton. Its basis is invariance, while the new approach assumed an explanation of the variability of the world, i.e. why some countries are prosperous while others are poor.

In the social sciences of the XX century, modernization theory, dependence theory and Marxism competed for the right to explain the evolution of the world. The idea of modernization became popular in American research in the mid-1960s. Its dominance was attributed to the global leadership of the United States in the post-war world due to technological, political and military expansion. Prosperity and stability have now become the key characteristics of American society, which was set as a reference example for the «underdeveloped» peoples of Asia, Africa and Latin America.

It was believed that their development can be described by analogy with the biological evolution of organisms, i.e. from primitive forms to complex ones. In other words, it was evolutionary theory and functionalism that influenced the provisions of modernism, which was expressed in the use of dichotomous constructions «social differentiation», «social system» and focusing on the adaptation of «primitive» societies to constantly changing environmental conditions.

Interest in the countries of the Third World was largely associated with the growth of nationalism and revolutionary movements that broke out there after decolonization, which led to the desire of previously enslaved societies to participate in geopolitics. As a result, their development began to occupy a significant place in the consciousness of the elites of the USA and the USSR. A side effect of this problem is the accumulation of scientific information about new entrants to the global arena. Fortunately, the American government and private foundations have contributed to the expansion of research in this area.

The theory of modernization, therefore, is an ethnocentric, American, view of the world, representing a multifaceted process of change in all areas of human thought and activity. The unit of analysis here, as a rule, is the nation state, where each component - industrialization, political development, technological progress - leads to the transformation of another.

While collecting information about the former colonial societies, supporters of modernism faced the question «What is a traditional society?» For example, S. Huntington stated «Modernization and tradition are asymmetric concepts. What does not correspond to the present is traditional» (Tipps, 1973). Naturally, he understood the United States as the ideal of modernity. In general, the term «traditional» was formulated as the opposite of the concept of «modernity», and «traditionalism» ended after the contacts of the backward states with the technological West.

In this respect, the most widespread version of modernization was the concept of the Harvard sociologist T. Parsons. He identified the following types of human evolution: 1) primitive; 2) advanced-primitive; 3) intermediate; 4) modern. The primitive type is characterized by social homogeneity. Religious relations form the basis of interpersonal ties, and members of society have statuses prescribed to them, depending on age and gender. An advanced-primitive organization is divided into the simplest subsystems (political, religious, economic), and success in people's lives depends more on personal qualities. In intermediate systems, writing appears, due to which the process of accumulating information and storing it in human memory begins. Religiousness ceases to form values and ideals. Modern, i.e. European society, which emerged in Ancient Greece, is characterized by: 1) the decisive role of the market economy; 2) the rule of law; 3) social stratification due to the commercial, scientific, cultural success of a person (Parsons, 1991).

Another American scientist, W.W. Rostow, developed a theory of five stages of economic development: 1) traditional society, which include agricultural collectives under the rule of feudal lords; 2) a transitional society, where centralized states and commerce are emerging, national self-

awareness is growing; 3) the stage of «shift», characterized by industrialization leading to economic and political transformations; 4) the stage of «maturity» associated with the scientific and technological revolution and urbanization; 5) the stage of «high consumption», whose basis is the transformation of the production of mass goods into the most important sector of the economy (Rostow, 1960).

T. Parsons and W.W. Rostow thus viewed the process of social evolution as exclusively one-line. In addition, the theory of modernization considers the peak of development of the United States and the West with their values, ignoring alternatives in the form of, for example, the modernization of China, the USSR, Korea, Taiwan, achieved not by borrowing the principles of a free market, the rule of law and protection of private property, but «from above» those thanks to the strengthening of dictatorial regimes there.

The next paradigm is the concept of «core / periphery» expressed by R. Prebisch - Executive Secretary of the non-governmental organization ECLA (Economic Commission for Latin America) - and, as a result, borrowed by I. Wallerstein to describe the modern world-economy. R. Prebisch's views on capitalism are reflected in a series of lectures (1945-1949) under the general title «The Crisis of Kensian Political Economy». He believed that Keynes's theory could not explain the cyclical model of the development of world capitalist economies, as a result of which R. Prebisch introduced the concept of the relationship between the states of the center and the periphery (fourth lecture, 1949), which could indicate the problem of prosperity of some and stagnation of others.

The dynamic theory of the center-periphery assumed the following division of the world economy: the periphery specializes in the supply of raw materials to the center in exchange for the goods it produces. The core has the ability to issue a reserve currency, which forms the basis of monetary circulation in the periphery, which leads to a situation when the imports of peripheral countries are paid for in the currency of the core state. The key idea of the proponents of this approach is that the «undeveloped» states of the periphery are poor because most of their resources flow to the core powers.

In the USSR, comprehension of the development of the Third World countries began, as in the United States, after the war. Two features were present here: 1) N. Khrushchev's speech at the Twentieth Congress of the Communist Party (1956), where the idea of progress was assumed in the spirit of the same modernization theory, with the only difference that his model was the USSR, not America; 2) the concept of the Asian mode of production (AMP) - a structure that existed in the East and is based on power-property.

It was the AMP that caused confusion in the Marxist sequence of modes of production, which brought the one-line process of history from the primitive system to communism. However, if some countries have passed the AMP, and others have not, then Marx's universalism, created for western societies, is false and does not explain the reason for the prosperity of some and the decline of other regions.

World-System Analysis

World-systems analysis has become the next paradigm for the analysis of the world. F. Braudel's approach was limited because focused on the study of capitalism from the XIV to the XVIII centuries, without touching on modernity, which will be analyzed by I. Wallerstein, who tried to break down the barriers between the social sciences and to rectify the situation in which researchers write on ridiculously narrow topics, avoiding the issues of power and social conflicts in world history. However, the main goal of I. Wallerstein was the desire to prove the inconsistency of the theory of modernization, whose alternative was the world-system analysis.

Before moving on to its main provisions, it is important to recall that a significant role in the intellectual development of I. Wallerstein belongs to M. Weber, who explained why the European world economy did not transform into a world empire. The reason lay in the capitalist foundation of the modern world system, fueling the competition between states to attract transnational capital. In other words, each state sought to attract freely circulating capital, and this latter

dictated the conditions on which it agreed to «serve», and capitalism persists until the national state gives way to the world state.

In addition to the legacy of M. Weber, I. Wallerstein relied on the concept of the core-periphery, put forward by the developers of ECLA. He borrowed the idea of the death of capitalism as a system from D. Schumpeter, who insists that capitalism has nurtured the seeds of its own destruction at birth. The sociologist's concept of worlds-systems was an analogy of K. Polanyi's three economic models - interchange, redistribution, market - which corresponded to mini-systems, worlds-empires and worlds-economies of I. Wallerstein. To analyze the cycles of the rise and fall of the world economy, he used the research of K. Bücher, G. Schmoller, I. Kondratyev. The «Annales school» represented by F. Braudel and also Marxism with the ideas of the class struggle played a significant role on I. Wallerstein. As a result of the generalization and revision of the above-mentioned material, I. Wallerstein, in contrast to modernism, which asserted the one-line nature of social evolution, introduces the concept of world-system from now on without considering a single state as a unit of analysis.

What is a world-system? Let's make a reservation - the world in I. Wallerstein's version does not cover the planet, as it seems at first glance, but is an autonomous political and economic zone that combines the principle of globality and consistency. That is why I. Wallerstein wrote this term through a hyphen. His worlds are territories with large and small populations, capital and labor movements.

There are several historical systems: *mini-systems* are characteristic of primitive societies that economically operate on the basis of interchange. *World-empires* are systems for the redistribution of luxury goods over long distances under the control of elites through their military power and political power. Only with the genesis of the European *world-economy* in the long XVI century (1450-1640) did the formation of a market-type capitalist system begin, when the center turned out to be north-western Europe with strong state power, an increase in production specialization and monopolization; Eastern Europe and Spanish America became the periphery; semi-periphery became Mediterranean (Wallerstein, 1974). From 1730 to 1840 India and the Ottoman Empire fall into the capitalist zone (Wallerstein, 1979) since 1750 Africa (Wallerstein, 2000) and Asia (Majid, 2000; Chew, 2014).

Thus, I. Wallerstein's analysis focuses on the networks of interaction of such «worlds» and erases the line of boundaries between them, going over individual states in order to identify the general laws of the evolution of the world system. Hegemony is a key factor in the stability of the world system, where leadership is ensured by the country's dominance in production, finance, minimal use of military force (which, nevertheless, exists), imposing its culture on the world. So, from 1450 to 1650 it belonged to Holland, from 1750 to 1900 – Britain, and since 1945 – the United States.

In fact, the capitalist world-system was not the first in a row, but it turned out to be the only surviving and lasting success of the global economy, which divided the ecumene into a core (Europe, the USA, Japan), a semi-periphery (Russia, the countries of Eastern Europe and south-East Asia), periphery (states of the Third World). Nevertheless, I. Wallerstein predicted the loss of geopolitical influence for America. Systems are finite. They go through cycles of birth, transformation and decline for a *longue duree*, meaning their extension. Thus, modern capitalism, like any system, will eventually die (Wallerstein, 2000; Mitrovich, 2007; Kuacker, 2014).

Further. I. Wallerstein called economics, political science, and sociology to interdisciplinarity. It, in his opinion, constitutes a single political, economic and socio-cultural space. The scientific barriers, erected by the liberalism of the XIX century that dominated the humanities, turned out to be incapable of synthesis, since the state, market and society were thought of as irrelevant categories of social reality.

I. Wallerstein's approach is not a theory, but a paradigm. The theory is based on empirical confirmation of logical inferences. Theories are volatile because in the light of new data, they undergo transformation, leading either to the refutation of the theory, or to the formation of a new one. This is, first of all, relevant for archaeologists due to the discovery of materials that have not been introduced into scientific circulation, leading to a revision of established assumptions or the creation of a new theory that would otherwise interpret the previous one. On the contrary, a

paradigm is a conceptual scheme that pushes to the forefront of science previously unnoticed or completely unconscious aspects of social reality that improve understanding of the relevant phenomena and processes. In addition, the gains achieved are being introduced into a paradigm to find new gaps. When new questions and problems no longer arise within a paradigm, it falls out of use (paradigm shift). In other words, world-systems analysis, in general, is not a theory, but a set of approaches that share key aspects of early versions of the analytical view of the world and, due to their flexibility, bring something relevant to the paradigm.

Historical globalization

By the end of the XX century, the capitalist system became planetary, giving rise globalization, which, in fact, was not something new, but was the fundamental phenomenon of the world system. Globalization should not be understood as a mere phenomenon of modernity, since the exchange of technologies, goods and cultural ideas that form networks of links between civilizations has existed since ancient times. This is a natural process.

Of course, the world has become truly global only today. But the origins of globalization, I think, are associated with the agrarian revolution and the fate of people who built the world's first cities in the river lowlands of the Ancient East. Thus, A.G. Frank singled out the Afro-Eurasian World-System with a duration of 5000 years, which arose in the zone of the Fertile Crescent in the 4th millennium BC. In his opinion, before the ascent of Europe, the primacy in the World-System was replaced by the civilizations of the Fertile Crescent, then Macedonia, Rome, the Ottoman and Persian empires, China (Frank, 1993).

A.G. Frank identified five most important features of the World-System: 1) the trade of civilizations, which forms a network of interdependent contacts; 2) the accumulation of capital by civilizations; 3) the core-peripheral structure is a key feature of the world system; 4) the world system is characterized by the rivalry between rising and declining hegemonies; 5) economically, the World-System develops thanks to long cycles of ascending and descending phases (Frank, 1993; Frank, Thompson, 2005).

Other specialists, K. Chase-Dunn and T. Hall, accepted I. Wallerstein's concept of the capitalist world-economy, but considered it one of the many global systems that existed before the XVIth century (Chase-Dunn, Hall, 1991; Chase-Dunn, 1994). Their typology is as follows:

Systems of consanguinity

A: Stateless, classless societies:

1. Hunters, gatherers, pastoralists
2. Bigmen distributing the surplus product that appeared as a result of the transition from early primitiveness to late In: Chiefdoms.

II. Systems dominated by tribute (cities, states)

A: Primary world systems (Mesopotamia, Egypt, India, China, pre-Columbian America)

B: Primary empires formed as a result of the conquest of autonomous states (Sumer and Akkad, Egypt of the Old Kingdom, Zhou, Teotihuacan, Huari)

C: Multicenter world systems consisting of empires, states and peripheral regions (Middle East, India, China, Mesoamerica, Peru)

D: Systems where trade is known, but tributary dominates (Afro-Asian world-system, including the regions of Rome, China, India)

III. Capitalist world-system

A: European capitalist economy of the 17th century

B: The modern global world system (Chase-Dunn, Hall, 1993).

They also developed the concept of core/periphery, subdivided into: 1) core / periphery differentiation; 2) the hierarchy of the core of the periphery. Within the framework of the first aspect, societies of different levels of complexity interacted within the boundaries of the same world system, while the second case indicates the existence of political, economic, military domination of some civilizations of the world system over others.

However, the most original design in this respect is T. Barfield's scheme, where the periphery (nomadic empires) systematically used the agrarian center (China), extracting surplus product from there. Remarkable is the fact that in the event of a core crisis, the periphery also fell into decay. In summary, the example of the nomads shows that the core/periphery differentiation and their hierarchy were radically opposed (Barfield, 1989; Kradin, 2016).

Today, in general terms, it is clear that the predecessor of the capitalist world order was probably the Afro-Eurasian world system, which was born in the Middle East. Already in the V–IV centuries BC. here trade in obsidian, metals, leather and textiles is recorded, which reached the Ist millennium BC. Large scale and has absorbed the territory of the Indian Ocean basin from the east coast of Africa to Indonesia, Southeast Asia and China. In this space, the leading role was played by Persian, Arab and Indian merchants who traded in luxury goods, building materials and food.

Another canal that connected medieval Europe with India through the sea trade in spices was opened by the crusaders in the XI–XIII centuries, and in the XIII–XIV centuries. Along with ocean trade, a land corridor was formed that ran through the possessions of the nomadic empires of Eurasia and contributed to the unity of Europe, East and Asia. The most important role in such integration was played by the Mongols - intermediaries in the exchange of goods and technologies in various zones of the world system. Thus, 300 years before the leadership of the West, looking at the world from a height, there is a tendency for "ecumene compounds" or archaic globalization.

One of the key periods for the Afro-Eurasian world system was the XV century, when the Ottoman Empire rose in Western Asia, which blocked the Levantine spice trade by the XVI century and «accelerated» the Europeans' search for a sea route to India. The great geographical discoveries also played a significant role, as a result of which the Afro-Eurasian world system was transformed into a planetary-capitalist one, which gave rise to the phase of modern globalization.

It is also quite possible that the Afro-Eurasian world system was the result of the unification of the three world systems of the Iron Age, which continued in the world from the end of the II to the beginning of the I millennium. What I talking about? After death in 1200 BC. world systems of the Bronze Age period from 1200 BC. at the beginning of the Ist millennium BC. turned out to be a gaping failure of world «perestroika». The old way of life has died, but the contours of the new order have not yet emerged. In the eastern Mediterranean, the rise of semi-peripheral civilizations (Cyprus, phoenician policies) took place for a short time, which eventually lost their influence, giving way to three systems: western, Indian and eastern, which formed the Afro-Eurasian world system. Thus, the Western world system, which arose between 1000 and 850 BC., covered Egypt, the Levant, Anatolia, Assyria, and the Mediterranean. The center of the Indian world system by the VIIth century became Magadha - the most powerful of the sixteen polities of the Ganges and Gandhara valley, controlling the iron trade in the region. India was connected with western Asia by a land route - through Bactria, northern Iran - and a sea route - through the Persian Gulf. Thanks to «via the Yunnan», China was also included in the interchange network, whose world system, centered in Chu, in the Yangtze river valley, in the VIIth–Vth centuries was connected with Central Asia by the Yunnan - Burma - India road. From about 350 BC the integration of the above three world systems takes place and by the Ist millennium BC. global exchange networks are established between them

Africa and Eurasia were linked to each other at the dawn of human history. Homo Sapiens appeared in Africa 300,000 years ago and has spread throughout the world as a result of migrations caused by climate change. A sharp warming of the climate in the Holocene era allowed the development of land connections between Africa and Eurasia through Arabia and the Sahara, which was then still a flourishing land with lush vegetation, rivers and swamps. However, 5000 years ago, due to the cooling, the Sahara turned into a desert, disrupting the communication routes of Africa and Eurasia. Thanks to the domestication of the horse and the invention of the chariot in Eurasia, a military revolution began 4,500 years ago, which led to the conquest of territories by Central Asian societies from Egypt in the southwest to the Yellow River basin in the east. Horses were also known in Africa, but did not make such a furor as in Eurasia due to the rampant epidemics in the region, which were carried by the tsetse fly. In the Ist millennium BC. ties between regions are reviving again. Largely due to the fact that the camel was domesticated in

Eurasia - a desert shuttle that facilitated travel from Eurasia to the Sahara and Arabia, and sea trade along the Red Sea linked Egypt with East Africa and India. Thus, Eurasia, penetrating deeper and deeper into Africa, gradually became its core, and that half-periphery. For clarity, see the image of the main routes of communication between regions.

Of course, the periods of regional integration were replaced by epochs of rupture, mostly due to climate change, but over time, the unity of this world system was restored. In addition, in the 1st millennium Afro-Eurasia was a global world-economy that linked the Mediterranean, East Africa, Arabian Peninsula, South Asia, Southeast Asia, Central Asia, Ceylon and China into a single pre-capitalist space.

Globalization, as indicated above, took many forms long before the XX century. It did not appear *ex nihilo*, but turned out to be a natural consequence, historical logic, of the development of the world from antiquity to modernity. In fact, interest in it came out of the American world history, which sought to discover connections between local civilizations of the past in the long term. Thus, the search for the origins of globalization in the «darkness of the ages» yields certain results that allow one to look at this process differently.

Globalization is a phenomenon that is by no means limited by modernity. Moreover, if we talk about the globalization of modern times, then it will turn out to be the last process of a series of world unions, which have been recorded since the rise of the first megacities of antiquity (Uruk, Babylon, Huarí, Cahokia, Delhi, Jericho, Damascus, Byblos, etc.), which required interregional networks and exchanged technologies, ideas, human resources, and goods, destroying the isolation of civilizations. The forms of interaction were different: trade, conquest, migration. Of course, archaic globalization did not yet cover the globe, but it made people strive for regional cooperation. Thus prehistoric North America, Europe, the Aegean Basin, Eurasia and the Ancient East in different historical periods, were zones of pre-capitalist world systems.

It follows from this that the world-systems analysis and the approach of historical globalization are applicable not only to modernity, but also to archaic societies (Edens, Kohl, 1993; Stein, 1999; Algaze, 1997; Kristiansen, 1999; Oka, 2008; Allen, 2012; Ling, 2014; Kardulias, 2016; Willson, 2016). It may be objected that the approach of I. Wallerstein is suitable for describing capitalism, which is limited to a 500-year cycle. In general, it is, but there are many examples of regional integration, demonstrating the complexity of the world system already in the Bronze Age in Southwest Asia, whose economies could easily move from the core to the periphery. This fact allowed the latter to maintain autonomy and eliminate some of the exploitation and lack of knowledge characteristic of the modern world system. In addition, it was the periphery of barbarism that had a significant impact on the development of the main regions.

Understanding the principles of work of the world-system analysis and historical globalization, it is possible, albeit in the most general form, to discern in world history a certain phenomenon of the integration of regions towards ever greater interaction on the several levels: *Local level* of the IV millennium BC, represented by pre-state forms of simple and medium complexity. The beginning of the agrarian revolution. *Regional level* fell on the period from the second half of the 4th millennium BC. to the first half of the 1st millennium BC. At this stage, the early states and the first empires emerged in the world. Economically, the second stage of the agrarian revolution begins. *Continental connections* (second half of the 1st millennium BC–XV century) between the regions existed from 490 BC. Until 1492 year, mature states were formed here along with empires. The final stage of the agrarian revolution. *Intercontinental or oceanic level* (late XV century - early XIX), and industrialization begins in production, discovery of new parts of the world through geographical discoveries, colonialism. *Global networks* were established at the beginning of the XIX century and exist until XX century. The genesis of supranational structures (Crozier, Huntington, Watanuki, 1973) and the completion of industrialization. *Planetary level* (started in the last third of the XXI century). At this stage, the strengthening of supranational structures is recorded, erasing state sovereignty, as a result of which the latter begins to search for new ways of political integration. If the states don't find the way out a further path out of this situation may be the collapse of national states, the collapse of the capitalist system and increased regionalization in the form of a rise of regions-economics.

The GDELT Project (Global data events language and tone)

The modern world requires the ability to work with big data. However, as usual, a significant part of russian specialists prefer to stay within the narrow framework of their topics, which in turn stimulates the uncontrolled growth of micro-studies that are poorly consistent with each other.

An example of working with big data is The GDELT Project led by Kalev Leetaru. From 1801 to 2005 GDELT digitized all available information for seven countries - China, Russia, Japan, Germany, France, USA, UK. The main criterion for assessing was the question of how well the development of these countries corresponded to the corridor of opportunities that was determined by the empirical generalizations of big data? It turned out that the listed countries besides Russia corresponded to the existing corridors of opportunities, and the Russian history «broke out» from it. Conclusion: there is no single, universal approach to the development of complex systems. *The path traversed by the West, in fact, is not universal, but unique.*

Intersen's destiny project. By 2008 year, GDELT had digitized all available research on large countries, and by 2013 year was taken under the wing of the CIA. All publications on the analytical and predictive part of world development have disappeared not only from scientific journals, the Internet, but also the Darknet. All that can be found now, for the most part, old developments, while new ones are applied to practical use. Despite this, even now, GDELT is showing a very successful example of working with big data.

The principle of work of GDELT with large amounts of information is very interesting. The project identifies three units of research: events, situations and transformations. *Events*, single actions of one or several subjects, are the basic units of analysis. Events always take place within a situation, causing it to change. *Situations* are extended during the action, united by the unity of the subjects' actions, the point of application of efforts and the existing conditions. *Transformation* is the transition from one situation to another. Overall, it is a good language for studying the historical functioning of any system, both pre-capitalist and capitalist.

Such an analysis is good for a general understanding of systems, but it should be borne in mind that for a deeper analysis it is important to remember that in different systems there are patterns that are not in another. For example, power and property are different in different civilizations. Therefore, applying the technique of analyzing large systems, it is necessary to analyze both general and specific issues without diving into any of them. This is a kind of a view from above, taking into account general trends and individual characteristics of particular historical systems.

Conclusion

The familiar world is changing. Not only its image is transformed, but also the basis. From now on, the most important task of the social sciences should be the desire to track the most important trends in global evolution. A kind of analysis of the changes in the world from the dawn of history to the present day. This can be helped by world-systems analysis, historical globalization which, on the basis of big data, for example, GDELT Project, will be able to describe the changing global reality. From now on, the Cartesian dismemberment of the whole into elements does not meet the needs of a modern, global order, since it does not cover the entire spectrum of socio-economic, political and technological changes in the world system, focusing on its individual aspects: the market, civil society, policy.

Moreover, two questions are still relevant: «when?» and «where?» globalization started. Probably, its origins are hidden under the shadow of the past capable, I think, to explain the features of the globalization process of our time.

References

- Algaze G (1999) *The Uruk World-System. The Dynamics of Expansion of Early Mesopotamian Civilization*. The University of Chicago Press.
- Allen T (2012) Bronze, Boats and the Kentish Seaboard in Prehistory: the Role of Coastal Kent in a Major Trans-Continental Trade Route. *Archeologia Cantiana*. 132: 1–19.
- Barfield T (1989) *The Perilous Frontier: Nomadic Empires and China*. Blackwell.

- Blim M and Goffi G (2014) The Long and the Short: The Value of Concept of the Long Duree in the Analysis of Contemporary Economic Development and Decline. *Economia Marche Journal of Applied Economics*. XXXIII(1): 94–113.
- Braudel F (1958) Histoire et Sciences Sociales: La Longue Duree. *Annales. Economies. Societies. Civilizations*. 4: 725–756.
- Brodel F (1989) *Svidetel'stvo istorika* [Treatment of historian] Moscow: Nauka.
- Chase-Dunn K and Hall T (1991) *Core/Periphery Relations in Precapitalist Worlds*. Boulder, CO: Westview.
- Chase-Dunn K and Hall T (1993) Comparing World Systems: Concepts and Working Hypotheses. *Social Forces* 71(4): 868–875.
- Chase-Dunn K and Hall T (1994) The Historical Evolution of World-Systems. *Sociological Inquiry*. 64(3): 257–280.
- Chase-Dunn K and Hall T (1994) Forward into the Past: World-Systems before 1500. *Sociological Forum*. 9(2): 295–306.
- Chew S (2018) The Southeast Connection in the First Eurasian World-Economy 200 BC–AD 500. *Journal of Globalization Studies*. 5(1): 82–109.
- Eedens C and Kohl P (1993) Trade and World-System in Early Bronze Age Western Asia. In: C. Searre, F. Healy (eds.) *Trade and Exchange in Prehistoric Europe*. Oxbow Books. Oxford: 17–34.
- Frank A (1993) Bronze Age World-System Cycles. *Current Anthropology*. 34(4): 383–429.
- Frank A (2005) Thompson W. Afro-Eurasian Bronze Age Economic Expansion and Contraction Revisited. *Journal of World History*. 5(16): 115–172.
- Kardulias PN (2014) Archeology and Study of Globalization in the Past. *Journal of Globalization Studies*. 5(1): 110–121.
- Kradin N (2016) Mongols Empire and the Debate of the Nomadic State Origins. In: B. Cerasetti (ed.) *Papers in Honour Maurizio Tossi for his 70th Birthday*. International Series: 369–377.
- Kristiansen K (1999) *Europe before History*. Cambridge University Press.
- Kuacker GD (2014) From the Alienation of Neoliberal Globalization to Transmodern Ways of Being: Epistemic Change and the Collapse of the Modern World-System. *Journal of Globalization Studies*. 5(1): 154–170.
- Lee R (2018) Lessons of the La Longue Duree: The Legacy of Fernand Braudel. *Historia Critica. Lo Micro y Lo Macro: Los Espacios en La Historia*. 69: 69–77.
- Ling J and Uhner C (2014) Unher C. Rock Art and Metal Trade. *Adoranten. Scandinavian Society for Prehistoric Art*. Tanums Museum Hallristnings Museum Underslos. 2014: 23-43.
- Manning P (2014) Africa's Place in Globalization: Africa, Eurasia and their Borderlands. *Journal of Globalization Studies*. 5(1): 2014. 65–81.
- Mitrovic R.L (2007) Immanuel Wallerstein Contribution to Mondology and the Critical Theory of the Global World System Transition. *Philosophy, Sociology and Psychology*. 6(1): 100–122.
- Oka R. and Kharupukha M (2008) The Archeology of Trade Systems. Part 1: Towards a New Trade Synthesis. *Journal of Archeological Research*. 1(16): 339–395.
- Parsons T (1991) *The Social System*. Routledge.
- Rostow WW (1960) *The Stages of Economic Growth. A non-Communist Manifesto*. Cambridge University Press.
- Stein GJ (1999) *Rethinking World-Systems. Diasporas, Colonies and Diasporas Interaction in Uruk Mesopotamia*. Tuscon: University of Arizona Press.
- Tipps D (1973) Modernization Theory. *Comparative Study of Societies*. 15(2): 973. 205–213.
- Wallerstein I (1974) Capitalist World-System and Its Future Demise: A Comparative Analysis. *Comparative Study in Society and History*. 16(4): 390–415.
- Wallerstein I (1979) The Ottoman Empire and the Capitalist World-Economy: Some Questions for Research. *Review (Fernand Braudel Center)*. 2(3): 389–398.
- Wallerstein I (2000) Africa in a Capitalist World. In: Wallerstein, I (ed.) *Essential Wallerstein*. New York: New Press.
- Wallerstein I (2000) Globalization or the Age of Transition. A Long Term View of the Trajectory of the World System. *International Sociology*. 15(2): 251–263.

Willson ND (2016) *Regional Interaction in World-System Incorporation in during the Classic Period Western Sierra de Los Tuxtlas, Mexico*. Arizona State University.