

The 'Age' of Globalization. How Old is the Global World?*

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The title of the paper poses two interconnected, but yet analytically distinct questions. Let us dwell on each of them.

How Old is the Global World?

The 'age' of global world does not equal to the 'age' of human history. From the perspective of Big History (Universal History, Megahistory), which is one of the most groundbreaking fields in historical research viewing the integrated history of Space, Earth, life and humanity on large-scale time spans using the multidisciplinary approach, as well as the co-evolution of inanimate and animate nature, and social systems, the global world emerged with the Big Bang (see Christian 2004). Focusing specifically on the 'human' global world, its age again is not equal to the age of humankind as a species. Indeed, throughout the early history humans dwelled in a number of separate societies, the vast majority of which hardly interacted with each other. In other words: there is a clear and long period between the global world and the 'human' global world.

In our opinion, the 'human' global world emerged with the establishment of stable relationships and systematic interaction between societies (territories) which comprised the vast majority of the world population.

From this perspective, the definition of the global world is close to that of the World-System, the largest 'suprasocietal system', which originated in the Middle East as a result of the Agrarian revolution and came to comprise the entire world through numerous cycles of expansion and consolidation. In the course of these cycles, the center of the World-System has repeatedly moved; for many centuries China played this role, then it shifted to Europe, and later, in the nineteenth century, to North America (see Grinin and Korotayev 2009: 131–133). Respectively, in order to determine the age of the global world, we can well rely on the following criteria developed in the framework of the world-system approach:

- Generation and diffusion of innovations (Korotayev 2005, 2007);
- Information networks (Chase-Dunn and Hall 1997);
- Trade networks of luxury goods (Frank 1990; Frank and Gills 1993; Chase-Dunn and Hall 1997);
- Military-Political Networks (Frank 1990; Frank and Gills 1993; Chase-Dunn and Hall 1997);
- Trade networks of mass consumption goods (Wallerstein 1974, 1980, 1988, 2004).

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Depending on the chosen criterion, the age of the World System can differ significantly. However, these criteria can also be represented as successive stages of the World System development, reflecting its increasing connectivity, which, after many cycles of expansion and consolidation, allowed the emergence and consolidation of a truly global World-System. If we compare these criteria to the Agricultural (Neolithic), Industrial, and Informational revolutions, and the major economic and technological novelties they brought, it is possible to suggest the following periodization of the global world:

1. The formation of the 'primary' world system in the Middle East approximately between the ninth and seventh centuries BCE is directly connected with the Agrarian revolution. One can hardly call this primary world system 'global' as it covered only the territory of the Fertile Crescent (Palestine, Syria, Northern Iraq and Western Iran). But there were also real (albeit very slow) informational connections, through which the North African and Eurasian region systematically obtained the most important agricultural and craftsmanship innovations from the Middle East, such as domesticated grains, large and small domesticated cattle, horses, ploughs, wheels, copper, bronze and iron products, *etc.* (Grinin and Korotayev 2009: 131–133; 2013; 2014).

2. Considerable consolidation of the world-system and its internal connectivity occurs in the era of agrarian empires. From 1200 BCE to 200 CE, numerous agrarian empires gained power and achieved prosperity, such as the Hellenistic world, the Roman Empire (covering the entire Mediterranean), the Persian Empire, the Achaemenid Empire, the Parthian Empire, the Kushan Empire, the Maurya Empire and the Gupta state in Northern India, the Qin Empire and later the Han Empire in China. The 'circulatory system' of this larger World System was based not only on the network of information exchanges, but also on the network of long-distance trade in luxury goods. The Great Silk Road became the central 'artery' of this system, linking the Roman Empire with the Han Empire since approximately second century BCE, passing through all regions of the Afro-Eurasian World System. Chase-Dunn and Hall even believe that it is the establishment of trade ties between China and Rome through the Silk Road about 2200 thousand years ago that gave birth to the Afro-Eurasian World System (Chase-Dunn and Hall 1997: 149; see also Benjamin in this volume).

3. The emergence of the genuinely global World System dates back to the 'long sixteenth century'.¹ It was born as a result of a series of expansion cycles of the initial World-System, which grew to encompass more and more new societies. The era of Great geographical discoveries played a central role in establishing stable and intense connections between regions hosting the absolute majority of the world's population. In our opinion, this period can be considered as time of the birth of the global world. At the same time, the discovery of new rich resources of the New world – first of all, silver – and their transportation around the world (through the system of historical and newly laid land and sea trade routes) enhanced the world trade and the connectedness of the global networks in general (Flynn and Giradez 1995, 2012; Maddison 2001, 2010).

4. Further development and growth of the World System's global connectivity is directly related to the 'modernization transition', that is to the transition from traditional to modern societies. Often the beginning of modernization and the birth of modern societies in this period is associated with the British industrial revolution and its subsequent spread first to Europe and the USA, and then worldwide. However, with all the significance of the

¹ The term introduced by Fernand Braudel (1973) to denote the period from 1453 to about 1640, later caught up and got widespread in macrohistorical research.

industrial revolution, such an interpretation would unacceptably narrow the scope and downplay the significance of many other aspects of modernization transition, affecting all spheres of human life. Among its main components (in different countries they emerged and gained peaks at different times, with different speed and intensity, proceeding unevenly among the population) include the following:

- Energy revolution – an explosive increase in human energy consumption; the transition from muscular energy of humans and animals and natural-organic (water, wind, wood) energy sources to fossil fuels (coal, and later oil and natural gas);
- Scientific revolution – the radical changes in the knowledge about the world, society, and human beings as a result of fundamental discoveries in mathematics, physics, astronomy, biology, anatomy and chemistry; the emergence of modern science, its principles, methods and institutions;
- Industrial revolution – the transition from an agrarian to an industrial mode of production, from manual labor to machines, from manufactory to factory, accompanied by a rapid growth of productivity and specialization;
- Agricultural revolution – the growth of labor productivity in agriculture, thanks to which, on the one hand, there arose the ability to feed a large population that is not employed in the agricultural sector, and, on the other hand – to free many workers from agricultural labor for industrial production;
- Educational revolution – the spread of mass public education and compulsory primary education;
- Global demographic transition – transition from traditional type of reproduction, characterized by high mortality and fertility rates, to its modern type, characterized by low mortality and low fertility; medical revolution (as well as new norms of hygiene in urban infrastructure) should be particularly highlighted as they made enormous contribution to reducing mortality and changing its structure by establishing efficient control over communicable diseases;
- Political modernization – this comprehensive notion implies the emergence of centralized nation-states; the emergence of bureaucracy (hierarchy of professional state managers); formalization of decision-making procedures; the spread of representative forms of government; the emergence of modern legal traditions, *etc.*;
- Urbanization – significant increase in the proportion of urban residents among the population (compared to traditional societies, where the majority of the population lives in rural areas); urbanization is dynamically linked with the concentration of population in certain places necessary for the modern industrialized production of goods and services, to changes in the employment structure (the rapid growth in the share of urban residents has been accompanied by rapid employment growth in the modern sectors) and dramatic changes in the lifestyle of the majority of population;
- Revolutionary development in transportation (steamboats, railroads, automobiles) and communications (the telegraph) which increased the World System connectedness and its informational penetrability.
- Financial modernization – the emergence of international credit and foreign direct investments on a truly global scale (formerly limited by the European region); the classic Gold standard; dematerialization of money.
- Cultural modernization – general modernization of lifestyle, the unification of time and space measurement, the emergence of mass culture, the transition from folk culture to professional one.

As a famous Russian historian, Nikolay Kradin stated, there are several waves of modernization:

The primary modernization affected mainly the societies of Western Europe between the sixteenth and the nineteenth centuries. The second stage of modernization encompassed the states in Eastern and Southern Europe, as well as Russia, Japan and Turkey. Modern Asia, Africa and Latin America constitute the third echelon of modernization. Most of them are still in the periphery of the modern World System. Some of them managed to make success in the course of modernization (e.g., India, the majority of Latin American states). Finally, some countries ('Asian tigers') have made considerable achievements (Kradin 2008: 172).

In our view, the varying pace and scope of modernization transition, the uneven spread of its effects and technologies in the seventeenth and eighteenth centuries laid foundations for the nineteenth-century phenomenon called 'the Great Divergence' – the rapidly widening gap in per capita income and living standards between the developed countries and the rest of the world throughout the nineteenth century. It began as a widening gap between the affluent countries of the North and the increasingly backward South; then the gap became evident among the countries of the global North, as the fast-paced West overtook the East.

5. New stage in the history of the global World System – and also of globalization, according to many researchers, – the world's transition to a new level of connectivity and 'globality', comes after the Second World War. This stage can be divided into two periods, corresponding to the fourth and fifth technological modes ('Kondratieff waves'). Moreover, the turning point between the two occurs to be a bifurcation point for a range of important global demographic and economic trends as well.

The first sub-period, from the late 1940s to the early 1970s, sees the mode of analog electronics, the revolution in air transport, household appliances, *etc.* The 1960s and 1970s are marked by the peak of the Great Divergence (the maximum gap in per capita income and living standards between the developed countries and the rest of the world), the peak of pollution in the first world, as well as the peak rate of global population growth due to the explosive population growth in the Third World countries.

However, after two critical decades (the 1970s and 80s) many secular trends changed to the opposite. Since the late 1980s, the world population growth rate has been declining, and the gap in per capita income between the countries of first and third world begins to narrow. At the same time we can observe in the developed world a growing implementation of energy-saving technologies, environmentally friendly production facilities, which reduced damage to environment but also made a significant contribution to the economic slowdown.

In the late 1980s and early 1990s, there is also a great 'leap' in the degree of openness in the global world due to the fall of the Berlin wall and the collapse of the Second World (the USSR and the Soviet bloc). The most important 'engines' of the new wave of integration are the innovations associated with digital electronics, information and communication technologies, primarily the proliferation of computers and the Internet. Google, according to the words of his 'father' Sergey Brin, is 'the great equalizer'. Amid growing openness the rise of China and other developing countries occurs, which narrows the gap between the developed and the developing countries. This phenomenon is called the 'Great Convergence'.

How Old is Globalization?

Let us now switch to the question of the 'age' of globalization. Obviously, the answer to this question will largely depend on our basic definition of globalization. If we take a very particular definition, selecting only certain traits of the phenomenon – such as, for example, the emergence and spread of the Internet – globalization will turn only a few decades old, dating its existence back to the 1970s (when ARPAnet was created) or even the 1990s (when the Internet truly started its global march).

If we look at more general definitions, the age of globalization will increase. Let us take, for example, the definition of Nayef R. F. al-Rodhan and Gérard Stoudmann: 'globalization is a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-human activities' (al-Rodhan and Stoudmann 2006: 36). In this case we can speak of about ten thousand years of history of globalization because, as shown above, transnational and transcultural integration occurred within the primary World-System from nine to eleven thousand years ago. Some researchers assume that globalization is even much older than that. For example, Nayan Chanda believes that globalization began with the exodus of the first humans from Africa, and its most important agents were at a later stage traders, preachers, adventurers, and warriors (Chanda 2007).

In general, there are three to four basic approaches to determine the age of globalization (see, e.g., Bayly 2004: 41–48; Hopkins 2002; Robinson 2007: 125–127; Hopper 2007: 14–25; Holton 2011: 37–39; see also the special issue of the *Journal of Globalization Studies*. Volume 5, number 1: Globalization in Historical Retrospective and World-System Analysis, Guest Editor Thomas D. Hall). All researchers listed introduce somewhat different chronological frameworks, but the common logic behind these frameworks allows us to identify the following four stages of the history of globalization, which are consistent with periodization of World-System's history and the 'birth' of the global world:

1. 'Archaic' globalization started around 5–10 thousand years ago. According to Paul Hopper, it can be assumed that the history of globalization as circulation of ideas, people (media culture), goods and artifacts around the world is measured in thousands of years and has its roots in the emergence of first civilizations. Hopper sees as indication of 'archaic' globalization in the migration of people, emergence and spread of world religions, empires and transregional trade networks (Hopper 2007: 14).

2. Pre-modern (proto-modern) globalization began with the integration of the global world in the 'long sixteenth century', that is about 500 years ago. This period is sometimes referred to as 'protoglobalization'. Thanks to the Great geographical discoveries the most important regions of the world got linked into one global network, which transported flows of goods, capital, migration, cultural symbols and artifacts, ideas, knowledge and technologies, pathogens and epidemics, etc.

3. Modern globalization covers the period from the seventeenth to early twentieth century (up until the First World War) and is closely connected with the spread of all modernization transition effects listed above. This period of globalization influences all spheres of social life – political (global diffusion of the modern state model, its management structures and institutions), economic (global diffusion of industrial production, fundamental industrial technologies and new technological modes, global movement of financial capital), social and cultural (intensified global migration, diffusion of ideas and standards, etc.). To the end of the stated period, it actively affects not only individual social groups, but populations as a whole (although, again, the effects of globalization are tangible for different societies and states at different speeds and with different intensity).

Globalization reached its culmination by the end of the nineteenth century (the period from 1870 to 1913 is sometimes even called the “Golden Age” of globalization), when international trade, international migration flows and international mobility of financial capital reached their historical peaks (for that time). Breakthrough technologies in transportation (steamboats, railroads) and communication (telegraph) laid the basis for the ‘Golden age’. The effectiveness of new transport technologies and their shrinking costs led to tremendous scope of international trade (not only in luxury goods but also in cheap and affordable mass consumption goods, including food products) and international migration. Unprecedented speed of communication through the telegraph rapidly accelerated the development of global financial markets and global capital flows.

4. The age of ‘newest’ globalization equals to several decades; its origin is closely connected with technological revolution and new opportunities for global integration created by information technologies.

The Age of Globalization and its Influence on the Research Discourse

There are diametrically different opinions about the stance of the ‘newest’ period of globalization among researchers. ‘Skeptics’ believe that the ‘newest’ globalization is only a logical resumption and continuation of the processes of global integration which intensively manifested themselves in the late nineteenth and early twentieth centuries (but were interrupted by two world wars), so there is not too much novelty to the phenomenon (see, e.g., Hirst and Thompson 1996, 1999; Hirst, Thompson and Bromley 2009; Wade 1996; Held *et al.* 1999). On the contrary, ‘hyperglobalists’ consider the ‘newest’ globalization as the transition of humanity to a fundamentally different stage of development (Gates 1995; Cairncross 2001; Ohmae 1999, 2005; Friedman 2007). It seems to us that like in most discussions, the truth is in the middle and both sides are right to some extent.

A number of aspects of the ‘newest’ globalization, especially economic ones, such as increase in international (cross-border) economic activity, economic growth of the interrelatedness and interdependence of national economies, growth of global markets, growing international mobility of goods can be regarded as a continuation of the ‘Golden Age’ of globalization, although each of these areas experienced tremendous changes under the influence of the new technologies.

Moreover, some other aspects of globalization, which were only emerging during the ‘Golden Age’, reached unprecedented magnitude in the second half of twentieth and early twenty-first centuries, and their role in the global world has changed essentially. For example, we can mention the rapid expansion and growing influence of transnational corporations, the emergence of the international division of labour and global production chains, *etc.*

However, along with this, the ‘newest’ globalization includes a set of fundamentally new phenomena, which are not connected with previous waves of integration in the global world. This is especially evident in the political and socio-cultural spheres – expansion of global governance institutions, voluntary limitation of national sovereignty in a range of issues; global market of short-term investments and currency speculation; radical change of the mass culture because of increasing access of the majority of population to information; formation of a single global information space, *etc.*

Another point is that both the ‘hyperglobalist’ and the ‘skeptical’ views of globalization see it as a sort of end-state of the World System (with the ideally globalized world being somewhat analogous to the ‘ideal markets’ from the textbooks on Economics), towards which it is either moving swiftly (‘hyperglobalists’), or moving extremely unevenly, slowly, or hardly at all (‘skeptics’). However, this leads to mixing the notions of ‘ideal’ and

‘global’. Moreover, such a multi-faceted and multidimensional process, encompassing all spheres of human life, can hardly be expected to have a single end-point. As Perraton points out, single equilibrium models are inapplicable to studying globalization (Perraton 2011: 62–63).

However, if we stop viewing globalization as a path to one single result (a ‘fully globalized’ world, whatever this notion could imply, from the fall of all national borders to full unification and homogenization of global culture – very frequently implying its hegemonisation as well, that is a cultural unification according to values, meanings, ideas etc. of one particular hegemonic culture), then we can assess it not only quantitatively, but also qualitatively – as a macrotransformation of the organization of the ways of life of the humanity, where global processes and institutions can cause local repercussions, and growing interconnectedness leads the specifics of development of one locality to influence ways of life and development trajectories in other, even remote localities.

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