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NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

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WORLD ORDER TRANSFORMATION AND SOCIOPOLITICAL DESTABILIZATION⁷

The present working paper analyzes the world order in the past, present and future as well as the main factors, foundations and ideas underlying the maintaining and change of the international and global order. The first two sections investigate the evolution of the world order starting from the ancient times up to the late twentieth century. The third section analyzes the origin and decline of the world order based on the American hegemony. The authors reveal contradictions of the current unipolar world and explain in what way globalization has become more profitable for the developing countries but not for the developed ones. The paper also explains the strengthening belief that the US leading status will inevitably weaken. In this connection we discuss the alternatives of the American strategy and the possibility of the renaissance of the American leadership. The last section presents a factor analysis which allows stating that the world is shifting toward a new balance of power and is likely to become the world without a leader. The new world order will consist of a number of large blocks, coalitions and countries acting within a framework of rules and mutual responsibility. However, the transition to a new world order will take certain time (about two decades). This period, which we denote as the epoch of new coalitions, will involve a reconfiguration of the World-System and bring an increasing turbulence and conflict intensity.

There are grounds to conclude that in 2011–2012 the World-System experienced to some extent a phase transition to a qualitatively new state of global protest activity. This phase transition is shown to bear some resemblance to the one which the World-System experienced in the early 1960s. The first (after 1919) phase transition of this sort occurred in the early 1960s and was related to the growth of global informational connectivity after the World War II, as well as the improvement of the means of protest self-organization due to the spread of television, portable radio receivers, portable electric loud-speakers and other technologies of the Fourth

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Kondratieff Cycle. The phase transition of the early 2010s was prepared by a new wave of growth of global informational connectivity, as well as the improvement of the means of protest self-organization due to the spread of various technologies of the Fifth Kondratieff cycle (the Internet, satellite television, Twitter and other social networks, mobile telephony etc.). Similarly to what was observed during the Fourth Kondratieff Wave, during the Fifth Cycle while the spread of these technologies was going on for many years before 2011, their internal colossal potential for generating and spreading protest activity was realized in one leap, as a phase transition.

Keywords: World-System, CNTS, anti-governmental demonstrations, phase transition, change of international powers balance, turbulence, Kondratieff cycles; hype-cycles; Internet; Arab Spring; sociopolitical destabilization; protests activity.

JEL Classification: Z

World order in the past, present, and future

The Arab world in general and the Middle East and North Africa have long been perceived as a zone of instability where wars, bloody conflicts and other upheavals can arise anytime. In this regard, the revolutions and popular unrest of 2010-2011 called the Arab Spring as well as subsequent perturbations and conflicts, are quite consistent with the logic of the turbulent events history in this region, although they shocking to it.

But, in addition to the Middle East, in the past few years, instability has intensified throughout the world. Unfortunately, this, apparently, is not accidental, but represents the beginning of a definite and rather long trend. But how can such a turn in global political relations be explained? Most likely there are a number of factors, including the fact that the world has entered a period of depressed economic development; this increases social tensions and frictions between economic actors and states. At the same time, there are deeper reasons for this, connected with fundamental changes in the very structure of the World System. The present paper is devoted to the analysis of the world order and this is appropriately manifested in its structure.

The creation of the world order

The international order as a system of relations and ideas about the foundations that should underpin the relations between states and generally in the world has started to form in the sixteenth century when diplomatic relations were established alongside with future contours of the system of 'great powers' in Europe. The prototype of legal principles of international relation system emerged as a result of the 1648 Peace of Westphalia which finished the devastating Thirty Years war in Central Europe. Those principles had been developing for more than two hundred years (about the Westphalian system see, *e.g.*, Spruyt, 2000). In this respect one should mark in the first place the 'sovereignty' concept which is manifested both in domestic and foreign policy primarily in the right of war and peace (see Grinin, 2012b) and in the legitimate supreme power. It came to the forefront after the French revolution in 1789.

The Thirty Years war was the legacy of the sixteenth-century European tradition of religious wars. But at the same time, it introduced two new foreign policy principles, which later would be actively employed by the politicians, namely: 1) the maintenance of the international 'balance of power' through supporting the weaker coalition against the stronger one; and 2) the priority of national interests over other (religious, ideological, *etc.*) ones. For example, Richelieu formulated and actively implemented both these approaches (Kissinger, 1994). As a result, although being a catholic state, France supported the weaker coalition of the Protestant states in their war against Habsburg Empire that strove for the world supremacy. At that time, it was the

diminished Habsburgs and disunited Germany which Richelieu (and later Louis XIV) considered as France's major national objective which would allow control over tiny German principalities. Given the fact that Richelieu was a Catholic cardinal, it was a bold step which had made foreign policy even more cynical than before. Since that time one observes a trend when the foreign policy started to develop according to certain stratagems and principles.

The Main Factors Influencing the Formation of the European/World Order

As already mentioned, within international relations framework the issue of the balance of power and its disruption is crucial for the perception of the states' foreign policy, as well as for the general pattern of the European and global relations. Deliberate foreign policy of some states (such as France, and later Britain) aimed at creating a number of military-political alliances enabled them to maintain and control the balance in their favor.⁸ Bearing this in mind, one can better understand the peculiarities of the eighteenth and nineteenth centuries' military alliances as well as the reasons of interchanges within them.

Undoubtedly, it was the geopolitical factor that laid the basis for such an order comprising multiple states and several strong powers and lacking a hegemon. In contrast, the Chinese geopolitical environment with China (the Celestial Empire) inevitably playing a central role in the region hampered the development of modern diplomacy based on a complex system of international relations with almost equal powers. The fundamental principles of the Chinese foreign policy evolved around such major issues as the protection of the state from the nomads through setting barbarians on each other and launching successful campaigns against nomads, *etc.* Therefore, it is not surprising that it was the European and not the Chinese model of international relations that was to a certain degree expanded to the global level.

The balance between powers could change due to a number of factors, including internal rebellions, fall of dynasties, *etc.* Among the long-term factors one should mention different growth rates of population, territory, wealth, industry, and commerce.⁹ But all this should be converted into military power. The gunpowder and military revolutions (Downing, 1992) led to the formation of advanced armies (McNeill, 1982), which also contributed to state-building and formation of the new-type states (mature in our terms [see Grinin, 2012a]). The results of the development of military technologies became evident in the course of successful Swedish (in the seventeenth century), Prussian, and Russian (in the eighteenth century) military campaigns. For our study, it is of particular importance to distinguish the technological innovations convertible

⁸ This is reflected in Lord Palmerston's claim that England has no eternal allies and no perpetual enemies. Its interests are eternal and perpetual.

⁹ Thus, in the sixteenth century the Portuguese and Spanish came to the front after their colonial success and enormous wealth got from there while similar discoveries caused a gradual decline of the Italian trading states.

into military advantages, because this factor became increasingly influential with time. For instance, France and Britain won the Crimean war (1853–1856) due to their technological superiority over Russia.

With the emergence of large-scale armies and completed transition to industrial production principle (Grinin, 2007) the state's overall economic power and supply with resources became the main determining factor. It was the total economic power of the anti-German coalition that led to Germany's defeat in both World Wars. Nowadays, different economic (and financial) indicators can help to define the trends of shifting balance of power.

Finally, the balance of power could be significantly although irregularly disrupted by a changing ideological paradigm. Since the latter significantly changed the perception of legitimacy of government and its actions, it also inevitably led to the exacerbation of international relations and wars between ideological enemies. The results of such violations manifested in the Reformation of the sixteenth and seventeenth centuries, religious wars and later in the division of Europe into the Protestants and Catholics. The French Revolution (in the late eighteenth century) caused a new ideological crisis which undermined the sanctity of monarchy and aristocracy.

This was followed by a quarter-of-a-century-long chain of endless wars, coalitions, the triumph and fall of Napoleon's Empire and restoration of monarchies. The new ideological turn began after the First World War as a result of the deep crisis of the world order, and after the Second World War the ideological gap between socialism and capitalism became a determining factor for the new world order.

Although the performed factor analysis of the establishment and changes in the world order is far from being complete, it can explain the causes and results of the evolution of the world order, and can be employed to make predictions on the directions of the future world order development.

From a Concert of Europe to the World Wars

The concert of great powers existed from the seventeenth to the mid-twentieth century and, according to Kissinger, it was a model of the world order which to some extent remains relevant even today (Kissinger, 1994, 2014). Of course, the powers in the list alternated and each change was associated with the shifts in the established world order. In the seventeenth century Sweden could have gained the 'great power' status if not being defeated in the Great Northern War by Russia that on the contrary joined the 'great powers concert'. Prussia joined this 'club' under Frederick II the Great in the eighteenth century. Then, the number of the great European powers remained the same (five – France, England, Prussia, Austria, and Russia) for about a

century until the unification of Germany and Italy, and later the rise of the USA and Japan. The shift in the European balance of power occurred mainly due to (a) a successful public administration reform and army reorganizations (Russia and Prussia in the eighteenth century are good examples here); (b) growing trade flows and wealth; and (c) a breakthrough in technoeconomic sphere (made, *e.g.*, by Britain as a result of the so-called Agrarian revolution and the final phase of the Industrial revolution in the eighteenth century). Thus, in the second half of the eighteenth century it was Britain that controlled the balance of power in Europe uniting in different alliance and joining or destroying coalitions. Meanwhile, the lag in sociopolitical transformations caused the decline of the former leading powers like Spain and Portugal, and left Genoa and Venice on the sidelines. The Austrian Empire and France had also considerably lost their positions; and the technological backwardness of Holland which used to be 'favorite' in the seventeenth century (Arrighi, 1994), together with its defeat in the war led to the loss of political status.

The Congress of Vienna in 1814–1815 and the Holy Alliance of the Russian, Austrian, and Prussian monarchs were significant thresholds in the development of principles and forms of control over international relations. The monarchs sought to maintain Europe's status quo and cooperated to undermine revolutions. This new ideological turn marked a return to the principle of legitimate (monarchical) power. Then, the concept and an effective system of the 'concert of Europe' emerged which involved the above-mentioned five great powers and was designated to maintain equilibrium and balance of power and to escape wars.¹⁰ It implied a multilateral diplomacy and opportunities of regular international conferences and existed until the Crimean war of 1853.

The increasing colonial activity involved the Asian countries (China, Japan, Burma, *etc.*) into the global affairs; meanwhile, many new states emerged in Latin America. That was the way how the world order originated with Europe still remaining the main arena.

The desire to preserve legitimate governments persisted in the European policy for three decades at times running counter the countries' national interests. However, the revolutionary wave of industrialization in Europe 1848–1849 and the change of regime in France had undermined this ideology. It was replaced by a much more direct and cynical one associated with political maneuvering in search for a combination of alliances which would allow getting profits regardless of the ideological proximity or dislikes. In Bismarck's Germany, this policy was called 'Realpolitik'. This disappearance of the ideological bias explains to a certain extent the existence of various and

¹⁰ One should note here that since the contemporary world has diverged from the unipolarity it is rather probable that the future World-System will be a kind of such 'concert' of some leading coalitions.

rather unstable alliances and coalitions of the great powers in the period between the 1870s and early 1900s. Generally recognized as a master of combinations and compromises, German Chancellor Otto von Bismarck initiated the creation of such unions.

As to the causes of tensions and conflicts between powers, they were mostly observed at the final stage of the division of colonial possessions and spheres of influence.

The German Confederation was established by the Congress of Vienna in 1815 (to replace the Holy Roman Empire destroyed by Napoleon). Although the number of German States reduced from three hundred to three dozens, Central Europe generally remained weak. Meanwhile, this was considered an essential part of the balance of power and such situation with Germany was the major objective of the national policy of France, Britain, and other powers. The rivalry for the influence in this part of Germany determined the policy of Prussia and Austria.

That is why the unification of Germany under the Prussian rule became the major change in Europe of the early 1870s, resulting from several victorious wars, Bismarck's shrewd policy and a number of mistakes made by Austria and France. This drastically changed the balance of power, since in the center of Europe a new state had emerged which was stronger than any other power in Europe. Thus, France got an urgent necessity to find an ally since after the defeat in the Franco-Prussian war it dreamed of revenge, but remained weaker than Germany. Bismarck in his turn was afraid of the war on two fronts, and therefore sought an alliance with Russia. But finally, after Bismarck's resignation, the conflict between Russia and the Austro-Hungarian Empire in the Balkans led to the Dual Alliance (1892) signed by Russia and France against Germany, and then there was the agreement between France and Britain (the Entente cordiale) in 1904 which transformed into triple Entente with Russia in 1907. Germany's military and economic strengthening made Britain take its favorite strategy of joining the less powerful group in order to weaken the leading continental power that is Germany. The rapid industrial development in all countries, the explosive technological innovations, a considerable change of war means – all these pushed rivals (especially Germany) to change the balance of power by means of a military victory.

From the Balance of Power to Bipolarity

Thus, the new military-political alliances emerged in Europe and divided it into two opposing blocks. Eventually, this led to the First World War which changed the global political landscape and the balance of power. Then, there was established the first international institution – the League of Nations – which attempted to influence the formation of new principles of

international relations. Besides, the system of international conventions continued to develop. Nevertheless, after the World War II the new stable world order had existed for quite a short period. The powerful changes that occurred (including the emergence of the USSR, the development of new weapons, and the great depression, the reluctance of Germany to recognize the imposed limits, and other factors) exacerbated the relations and unleashed another war.

The order established after World War II differed significantly from the previously existing one. First, there were only two strong powers (the USA and the USSR), in other words, the world became bipolar with two military blocks (NATO and the Warsaw Treaty Organization). The military core of this balance was nuclear equations and deterrence strategy. Secondly, it was based on ideological foundations which the previous world order had lacked. It is possible that it was ideological bias that supported a rather long existence of the post-war world order.

Generally speaking, a stable world order recognized and supported by the leading actors usually endured from three to four decades, or even less. Thus, the system that had existed before the French revolution (1789) had worked for less than 30 years. It was established after the Seven Years' War (*i.e.*, after 1763) and destroyed in 1790–1791. The Order established after the Napoleonic wars and the Congress of Vienna was destroyed by the revolutions of 1848–1849 and the Crimean war, and had existed for less than thirty-five years. The subsequent system of world order began to form after the emergence of the German Empire (1871), but developed only by the early 1890s and was destroyed by the First World War; therefore, it endured for less than two decades. The Treaty of Versailles (1919) was violated by Germany in 1935. Thus, the world order established after the Second World War existed from 1945 to 1990 that is for 45 years, and that was an achievement.

The Late Twentieth-Century Shift to Pax Americana. Globalization and the Crisis of the Unipolar World

The collapse of the socialist bloc and the Soviet Union destroyed the previous bipolar world order and led to the establishment of a unipolar world. Obviously, the ideas about the new world order that began to develop right in the late 1980s and early 1990s, often reflected the belief in the absolute domination of the Western economies, institutions and ideas (see, *e.g.*, Attali, 1991) and became almost synonymous to the idea of Pax Americana (see, *e.g.*, Brzezinski, 1998). Thus, Henry Kissinger's views (Kissinger, 1994, 2001) on the new balance of power were no exception. However, while the unipolar order was formed and developed the world balance shifted once again. This was caused by the countries' uneven economic and technological development. Over the last three or four decades globalization has been constantly and significantly effecting the changes in the world order. It eventually shifted the balance of economic power towards the developing world. One of the main reasons was the so-called 'deindustrialization' which meant a transition of a significant part of production, economy and technology from developed to developing countries (for more details see Grinin & Korotayev, 2014, 2015). The result is the Western countries' weakening economic growth and their diminishing role in the global arena while the rest of the world (developing countries) increases the influence (see Fig. 1).

Thus, during the two decades starting from 1991, at the background of weakening Europe and continuing stagnation in Japan one observed the rise of economic giants in Asia (China and India) as well as the emergence of a number of rapidly developing states (from Mexico to Malaysia and Ethiopia) which preserve their growth rates (although with some difficulties) and are likely to take the leading positions in the world in the quite nearest future.

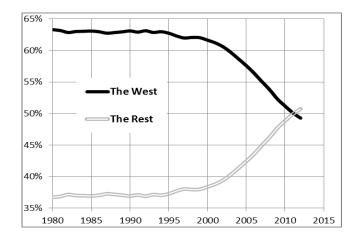


Fig. 1. Dynamics of the share of the West and the rest of the world ('the Rest') in the global GDP after 1980 (based on the World Bank data on the GDP calculated in 2005 purchasing power parity international dollars)

The decline of the American and Western leadership. Is the revival possible? By the 1990s, the USA, unlike the former world leaders, had concentrated a wide range of leadership aspects: from technological, financial and military to scientific and cultural. That was the first (and probably, the last) case in world history. But in 2001, being at the peak of their might, the USA was stricken by unexpected 9/11 events. That was a turning point after which many characteristics and patterns of domestic and foreign policy have become excessive. The USA

abandons their own principles of freedom and start surveillance over their own citizens, as well as the leaders and population of other countries. It starts to ignore the international law and principle of sovereignty (Herland, 2014).

Pretty soon, during the financial and economic crisis of 2006–2010, it became quite evident that the USA had been losing their leading positions. However, the talks about an inevitable decline of the American might began already in the 1970–1980s (see, e.g., Vogel, 1979; Kennedy, 1987). Since the 1990s, one observes an increasing number of political forecasts predicting an imminent decline of the American supremacy and simultaneous coming to the front of Asian economies (Attali, 1991; Colson & Eckerd, 1991; Arrighi, 1994; Frank, 1997; Buchanan, 2002; Kupchan, 2002; Todd, 2003; Wallerstein, 2003; Mandelbaum, 2005; NIC, 2008, 2012; see also: Grinin, 2010; Grinin & Korotayev, 2010a, 2010b, 2015). The increasing negative phenomena in America at the background of the Asian countries' success, made the idea of the American decline more feasible, causing either a feeling of triumph or a concern depending on one's preferences. Since 2008, there have appeared more publications arguing that America's power is decreasing, that it is no longer an absolute leader and that the unipolar world is being transformed, etc. (see, e.g., Milne, 2008; Zakaria, 2008; Haass, 2008). Many of such articles had rather striking headlines, for instance: 'America's Fall is a Dangerous Opportunity for its Enemies' (Tisdall, 2008); 'America's Power Cracks and is Broken into Pieces' (Gray, 2008); 'Sun Setting on the American Century' (Reid, 2008); 'Is it the End of the American Era?' (Kennedy, 2008). Such articles appeared and still appear on a rather regular basis (see, e.g., Bremmer, 2015; Klare, 2015). Sooner or later the United States of America will no longer be able to lead the world in its common way, and it can result in a drastic change of the geopolitical landscape (for more details see Grinin, 2009, 2011, 2012a, 2012b; Grinin & Korotayev, 2010b, 2011, 2015).

In 2008 Farid Zakaria, a famous political expert and editor of the *Newsweek International*, called for the USA to become a global mediator and develop, in cooperation with other countries, new rules for the world order. He wrote that the USA had two alternatives. Either it can reinforce the existing world order via cooperation with new great powers. However, it should compromise on some of its power and privileges, and agree that future world will have variety of opinions and different points of view. Otherwise, America may just passively observe how 'the rise of the rest' will rip to shreds of the world order that have been built for the latest 60 years (Zakaria, 2008). But he was wrong. The USA, having hardly recovered from the crisis, chose the third way – to undermine the power of its competitors and thus, preserve their position of the only superpower in the world. These 'efforts' have been increasing turbulence in the world

in recent years (Heuvel, 2015). All this means that we will face much more difficulties than we could on the way to a new world order (not American), which will be established sooner or later.

But still the question of whether the 'sunset' of the USA can probably turn into its new 'sunrise' remains open for discussions because many Americans will hardly put up with such a situation. That is why it is worth considering the arguments of those who believe that the USA can restore its power again.

First of all, the stabilization of the American economy after the crisis supports the ideas that the American age will last a long way down the road. Also, many people hope for a technological or other miracle which will revive the American power, or for the US ability to control the rivals (see also Milne, 2008; Kennedy, 2008; Bremmer, 2015). Technology, as well as a breakthrough in innovations, has quite a strong influence on changing the power balance and formation of a new balance. We have already stated our hypotheses that a new powerful technological wave will start in the 2030–2040s (see Grinin, 2007; Grinin & Grinin, 2015). The model of the new world order will strongly depend on who will lead this new technological pattern, especially if these innovations are converted into the military supremacy. Today's developing world invests more and more into technology and has achieved much in some spheres.

But it is quite clear that the USA holds the leading position as a claimant upon this technological lead. Thus, it has an opportunity to preserve its world leadership. Moreover, today the USA has much more financial resources for this. It goes without saying that the USA remains control over the global financial and information flows. There is, however, an important trend that should be marked out. During the last decades the American transnational corporations have shown more and more separation from the native state, where they feel cramped, thus involuntarily playing into the hands of developing countries. The USA's new economic partnerships (see below) can strengthen this trend, which is a great deal. The same way, the English technology and funds caused the rise of the USA, India, Canada, and Australia in the nineteenth century, while Britain itself ceased to be the world leader.

On the one hand, the world financial elite has become quite mobile. The world itself becomes global and 'digitalized' to the extent that boarders and territories will be of no account for big money and its owners. So, it seems that one more reset of the world order will hardly destabilize the position of the World-System center. But on the other hand, if the companies are predominantly active outside the USA then the American population can get poorer. While the inequality in the country is growing the internal social tension can increase. On the one hand, the US population is getting older, and very soon white population among young people will be overgrown by the non-white. All this may aggravate social conflicts. On the other hand, the USA is still attractive for immigrants, which bring human capital of high quality to the country (scientists, analysts, and engineers). In short, the processes will be rather complicated, and as any future processes, they may reveal quite unexpected phenomena.

Problems of the Decline of the American Leadership with regard to the World-System and the Signs of the 'Global Disorder'

The burden of the only superpower turns out to be beyond America's strength (Klare 2015). It should be taken into account that the USA will face not only other nations' wishes but also regional and sometimes world-scale interests. One can hardly admit that the USA interests are the interests of the world; besides, it is inconceivable to carry this burden of a superpower for indeterminate amount of time, interfering into everything. It is no wonder that even claims for this are becoming overwhelming and the reaction to the lack of power – more and more nervous.

At the same time, some political analysts and economists' hopes for a prompt and avalanching failure of the USA are groundless: it probably will proceed gradually while objective circumstances, including the growth of peripheral countries, promote it. As the connoisseur of great powers, Paul Kennedy notes this departure will be long (Kennedy, 2008; see also: NIC 2008; Zakaria, 2008). Besides, we should note that the world is still interested in the US leadership (see, *e.g.*, Barber, 2014).

Indeed, the weakening of the US leadership brings a bunch of problems with it. It is widely suggested that the USA place will be occupied by the EU, China or someone else (from India to Russia; more often they talk about China). But it is a big mistake, as it will not be just a simple change of the leader. When the USA loses its status of the leader, it will lead to the fundamental change of the whole structure of the world economic and political order as the USA concentrates too many aspects of the leadership. It means that the USA's position in the World-System will remain the same since no other country is able to concentrate as many leader's functions simultaneously. And that is why (as well as considering many other reasons) when the USA loses the leadership position, it means a deep and rather difficult and critical transformation of the World-System itself, when even the nearest consequences are quite unclear (for more details see Grinin, 2009, 2011, 2013b; Grinin & Korotayev, 2010b, 2014a, 2015). That is why it is necessary to analyze the whole range of consequences.

Thus, according to some analysts, the unipolar period is close to its end today. However, it has not yet been replaced by a new global order since there are multiple opposing principles

that operate in the world today and thus it looks more like a disorder (Le Monde, 2008). This disorder is supported by the activities of many, if not all global players, but in recent years a considerable disorder has been particularly caused by the US actions, which is not surprising. On the one hand, the USA declines without being substituted by any equivalent leader. Moreover, there is an ever-growing number of supporters of reducing the US presence in the world in the very United States (see Bremmer, 2015; Heuvel, 2015). On the other hand, the United States still has power which allows preserving its position in the world. However, the hegemon's clumsy actions evoke opposition in many countries worldwide. On the whole, the decline of the US leading positions together with the attempts of a number of states to change the global rules (*e.g.*, in relation to the dollar's status, *etc.*), as well as America's absolute unwillingness to concede any of its informal prerogatives, increase tensions in the world.

The Need for a New Order, Problems of the Transition Period and the Balance of Power

Our assumptions about the principles of a new world order are based on the following findings. First, no hegemon has the same range of leadership benefits as the United States to replace it today (for more details, see Grinin, 2011, 2012a, 2012b). Second, the weakening of the US leadership is inevitable and becomes more and more noticeable. However, the US will preserve a number of advantages for a long time (see *e.g.*, Bremmer, 2015; Zakaria, 2008). Third, the world is to some extent interested in the American soft leadership but without dictatorial ambitions to undermine the opponents' power. Fourth, the transition to a new world order requires a random search for forms, principles, and conditions to create precedents and the desired combinations. Therefore, it will be a long and difficult search. Fifth, the transition to the new world order will temporarily increase turbulence and strife, as well as the lack of stability and struggle between different patterns of the new order.

Thus, today there are ever clearly visible trends towards the fact that the new world order will be different, it will be the world without hegemon but with some centers of power and influence, among which the United States is likely to be the most important. But it can only claim the title of the 'first among equals' rather than the title of superpower and hegemon (NIC 2008). Accordingly, one can suggest the following two scenarios of the US withdrawal: 1) meaningful and the most profitable path of a new world order in the long-term with maximum possible preservation of its influence, but not a dictate; and 2) a bitter struggle of the United States to maintain the status quo, including various actions to undermine and weaken the opponents. This will inevitably create permanent tension and strife. Meanwhile, the United States seems to choose the second pattern (although a big delay of another economic crisis could make them resort to the first one). But even when following the second path the United States will be

increasingly forced to seek new alliances and allies. Anyway, it is the struggle for the American hegemony and its position in relation to the large and fast-growing countries that keep the main intrigue of the contemporary global contradiction.

Why is the increasing 'disorder' more probable, if not inevitable, than a smooth transition? First of all, a move towards a new order requires common wisdom and compromise, but this is particularly so with the United States. But the political elite have always lacked wisdom. However, there are also deeper reasons. The revolutionary change in the global balance of economic power which we mentioned above (see Fig. 1) creates objective conditions for the revision of the existing world order. However, it does not entail an automatic change in military and political balances. Figuratively speaking, this requires pulling the political component of global change (political globalization) to the economic one (for definitions and paradigms of globalization, see Andreev, Ilyin, & Zinkina, 2015). Obviously, the latter is far ahead of the former. And further development would be difficult without such pulling. Yet, the narrowing of the gap between economic and political globalization is inevitable and we denote this process as a reconfiguration of the World-System (see Grinin, 2013; Grinin & Korotayev, 2012a).

The major vectors of this reconfiguration include weakening of the former core of the World-System (the USA and the West), and simultaneous strengthening of the positions of a number of peripheral countries and generally increasing role of the developing countries. However, one should bear in mind that the 'catching up' (between the political and economic components of globalization) will also bring severe political and geopolitical crises in different regions. Elsewhere we have considered the crises and turmoil in the Middle East after 2010, as well as the Ukrainian crisis as both 'reconfiguring' and geopolitical crises which require transformations in the world order. At the same time, grave and probably unexpected crises in other societies or regions seem rather possible. The abruptness may be akin to earthquakes. And if to continue the geological metaphor, one should note that just like the tectonic shifts occur under the most mobile Earth's crust and at the boundaries of tectonic plates, the reconfiguring crises occur in the least stable regions and societies which are situated at the junction of geopolitical 'plates.' Both the Middle East and the Ukraine are the regions of this kind.

We also argue that stability or instability of the world order depends on the stable or mobile character of the balance of power. The current balance of power obviously undergoes some transformations. If the idea of the weakening United State is right, what would be the shift towards a new balance? We assume that one of probable scenarios is the creation of various alliances between countries to strengthen their positions and increase opportunities. As we have seen, this process has even involved the United States, who is usually reluctant in taking over different commitments. Thus, the search for a new balance of power has already started and it will be manifested in a more active creation of various alliances and coalitions of countries and their associations. We denote this process as an epoch of new coalitions (Grinin, 2009, 2011, 2012a, 2013b; Grinin & Korotayev, 2010b; 2011, 2012, 2014a, 2015).

We can find similar ideas in some other analysts' works (*e.g.*, Bremmer, 2015). Thus, for example, Michael Klare suggests quite a pragmatic scenario. In his opinion, one should accept the obvious facts on the ground that the United States shares the planet with other major powers: none matches the power of the United States, and is weak enough to be intimidated by the threat of the US military intervention. Having taken a more realistic assessment of the US opportunities, Washington should focus on how to co-exist with such powers as Russia, Iran and China, and how to settle the differences with them without increasing tension (Klare, 2015).

The Epoch of New Coalitions and the Outlines of the New World Order

Thus, the search for a new balance has brought us to the period which we call *the epoch of new coalitions*. The alliances can emerge accidentally and due to unexpected reasons which can be exemplified by the BRICS (Brazil, Russia, India, China, and South Africa). First introduced in 2001 by an American analyst Jim O'Neil as an appropriate acronym, BRICS during the last six years has become quite a real, dynamic, and multilinear alliance.

Thus, we see that the Earth has become rather tightly connected for cooperation even at a distance. Thus, there appear different geopolitical fantasies, some of which are likely to come true as it happened with BRICS. However, the flexibility of partnerships within the World-System framework will probably increase for some time, but some of the emerging alliances and coalitions can turn chimeric, ephemeral or fantastic.

The above-mentioned coming turbulence together with the formation of different alliances and combinations may last for some time. But along with probable increase of conflicts and political transformations in different regions there will increase the vector aimed at the formation of common frame for the states' interests. We hope that after a certain period of 'the game without rules' (during one or two decades) the global arena will nevertheless be considered as a common field of interests with acceptable and profitable rules of the game for everyone to follow. The completed catching up of the political component of globalization can create a trend when more and more states will start to develop their policy with the account of global interests.

Certainly, the above-mentioned ideas can seem utopian especially because of the selfcentered approaches and double standards that have recently intensified. But probably this shows that the world is in the search for the foundations of a new world order. Probably, this will require passing through certain cataclysms (*e.g.*, new economic crisis) since just the critical events bring dramatic changes.

The search for the most stable, advantageous and appropriate supranational organizational forms can bring to life different and rapidly changing intermediate forms, while the players at the global and regional stages will search for more effective and convenient coalitions and agreements. But finally, some of the new alliances and coalitions will transform from temporary into permanent ones and become effective supranational forms. During this process some new norms of international law will be developed whose necessity has already been much spoken about for some decades.

Thus, the foundations of the future world order must undergo certain transformations. Besides, the countries that continue to roughly and selfishly defend their national interests will lose in the final count. The largest states' policy aimed at their forceful global and regional dominance (including the most independent and selfish sovereign – the USA) will also undergo radical changes. The national selfishness will hardly disappear; however, any international action should be both relevant and ideologically justified. That is why there is a hope and perception that the concept of foreign policy will change and there will gradually increase the claims for common (regional, world, and group) well-being; yet, the formulations like 'the best representative of the world interests' can often conceal selfish goals. But anyway such transformation will lead to significant and mostly positive changes.

The new world order will call for: 1) a rather solid balance of power and interests; 2) new models of the supranational government and coordination of the global processes; and 3) new ideologies. To solve the first task one should recognize the principle of pluralism of political regimes when any regime (including the democratic one) has its advantages and drawbacks. The refusal from imposing democracy at all accounts can become a crucial constituent in creating a common frame of interests and rules. To solve the second task one should reject the idea of the universal democracy at all levels. The European Union's experience has shown that at the supranational scale the democratic procedures work rather improperly. Thus, one needs a comprehensive search for new patterns which would lack an ideological bias. Perhaps, here one could employ international expert organizations co-opted by different countries and coalitions as well as a certain quota system for them at the international level. As for a universal ideology, it seems it can emerge only on the basis of the search for new cooperation patterns.

Thus, although we anticipate rather turbulent times of an emerging balance between different countries and coalitions, the humanity will have rather good chances to use globalization to create the foundations of the new world order.

Arab Spring as a trigger of the global phase transition?

In this chapter we demonstrate that Kondratieff waves can be traced not only within various economic and technological indicators but also within the global pattern of protests. Furthermore, Kondratieff waves in technologies appear to be tightly connected with the K-waves in global protests that, in their turn, are tied – through the mechanism of expectations – with the hype cycle. On the other hand, we examine colossal potential of particular K-cycle relevant technologies to generate and spread protest activities. It tends to be realized in one leap as a phase transition.

In particular, we show that the recent upsurge in the global protest activities is connected with the diffusion of the communication technologies of the Fifth Kondratieff cycle. We fully agree with the importance ascribed to communication technologies and we would like to emphasize their role in shaping major manifestations of protest activity. It has already been noted that numerous events of revolutionary unrest, from the July revolution in France under King Louis-Philippe to Chinese revolts of 1989, were to considerable extent facilitated by technological developments – everyday newspaper technology in case of the 1848 Spring of Peoples, cassette recorders in case of the Iranian Revolution, fax machines in case of 1989 China revolts and so on (for a review see Toska, 2015: 137). The technologies are assumed to play the greatest role in the Arab Spring events and their global echo includes Internet-based communication technologies (Internet sites, Twitter, Facebook groups, blogging etc.), satellite television channels (first and foremost, Al Jazeera and Al Arabiya), and mobile telephony (Khosrovakhar, 2016: 152, Brynen et al. 2012: 233; Lynch, 2014: 93–110). It is important to note that we are dealing with the 5th Kondratieff Wave of technologies improvement. Khosrovakhar offers a typology of social movements as regards communication technologies they employ: premodern movements, "based on the transfer of information by word of mouth"; modern movements, based on print, radio, and TV; and post-electronic age¹¹. Net movements "based on new communication systems, with the Internet – especially Facebook, Twitter, and YouTube – are playing a major role. They are gender-mixed and youth-oriented as well as religiously open and politically inclusive... They are not based on charismatic leadership or monitored by professional revolutionaries or intellectuals" (Khosrovakhar, 2016: 150-151).

The world in general and the Arab world in particular were experiencing an unusually intensive surge of protests in 2011 - 2012. The Middle East (especially the Arab countries) contributed considerably to the surge in 2011. Although the protests in Algeria began earlier, it

¹¹ Though it appears more correct to denote this age as digital electronic (corresponding to the 5th K-wave) rather than "postelectronic, while the previous age can be called the age of analog electronics (corresponding to the 4th K-wave).

has already become a traditional practice to start the description of the Arab Spring events from December 17th 2010 when the young unemployed Mohamed Bouazizi committed selfimmolation in the provincial Tunisian town of Sidi Bouzid. The rising wave of protests resulted in an unexpectedly rapid fall of the Ben Ali regime primarily due to the revealed intra-elite conflict between the non-privileged army and the privileged security forces who were under special care of the President (see, e.g., Nepstad, 2011). As a result, the army sided with the protesters that determined the fall of the authoritarian regime in Tunisia. This surprisingly quick (and rather bloodless) fall of Ben Ali's authoritarian regime pushed the secular leaders of youth movements in Egypt to organize (with the widespread use of social networks) large-scale protests in their country. Due to considerable internal tension in Egypt (see, e.g., Korotayev & Zinkina, 2011; Grinin, Issaev & Korotayev, 2015; Korotayev, Issaev & Shishkina, 2016) this attempt caused an avalanche that led to the fall of Mubarak's regime. All of the above raised a wave of destabilization throughout the Arab world (the signs of which, however, were already visible immediately after the quick victory of the Tunisian revolution). The scale of destabilization in specific countries depended primarily on the extent to which there were present appropriate conditions such as internal elite conflict, intermediate regime type (halfdemocratic/half-authoritarian), the presence of disadvantaged groups (except guest workers), a high proportion of unemployed young people (especially with higher education), and so on (see, e.g., Goldstone, 2011, 2014; Beck, 2014; Lang & Sterck, 2014; Korotayev et al., 2011, 2014, 2013; Korotayev, Issaev & Vasilyev, 2015; Grinin & Korotayev, 2011, 2012b; Moore, 2012; Weyland, 2012; Wilson, 2013).¹² In some cases (especially in Libya and Syria), an important role was played by external destabilizing actions.

However, the rest of the world also experienced – under the influence of the Arab Spring – a very non-trivial upsurge of protest activity as well; one can remember here the numerous "Occupy..." movements, from *Occupy Wall Street* to *Occupy Abay*¹³. To sketch a brief picture of the "Occupy" protest activity in 2011-2012 and emphasize its truly global nature let us remember that this wave manifested itself in the USA (New York City, Detroit, Harvard University and so on), UK (London, Edinburgh, Glasgow etc.), Germany (Berlin and some other

¹² Note that by now the synchronizing factors of the Arab Spring events have been identified as follows: (1) a high level of synchronization of processes of modernization in most Arab countries, including the simultaneous sharp drop in infant and child mortality in the 1970s - 1980, against the background of the massive expansion of higher education. This has resulted in the 2000s in most of the Arab countries in the simultaneous explosion of the number of young people in general, and the number of highly educated young people in particular; (2) the synchronizing effect of the second wave of agflation (skyrocketing food prices), which peaked just in January - February 2011; (3) the synchronizing role of pan-Arab satellite channels; (4) the synchronizing role of the pan-Arab Internet (Tsirel, 2012a; Khodunov, Korotayev, 2012; Grinin, Issaev & Korotayev, 2015; Grinin 2013a; Korotayev & Zinkina, 2011; Korotayev et al., 2011). We would note immediately at this point that the last two factors are directly connected with the technologies of the 5th Kondratieff cycle.

¹³ "Occupy Abay" is the appellation of the Russian 2012 Occupy movement named this way because its members chose as their main meeting point a square around the monument of Abay Kunanbayev (a famous Kazakh poet) in one of the central parts of Moscow.

major cities), Norway (Oslo), numerous cities of Canada, Malaysia (Kuala Lumpur), Australia (Melbourne and Sydney), New Zealand (Auckland and other cities), Nepal (Baluwatar), Cyprus, Ghana (Accra), Nigeria (Kano, Lagos, Abudja), Iceland (Reykjavik), South Africa (Johannesburg and Cape Town), Japan, Russia etc. One should also remember the 15th October 2011 global protests, which were endorsed by people from dozens of countries. In addition to the abovementioned *Occupy* protests, one could recollect major protests in 2011 in Spain, Portugal, Greece, Italy, Ireland, Albania, Macedonia, Bulgaria, Georgia, Armenia, Azerbaijan, Belarus, Mexico, Bolivia, Chile, Burkina Faso, Malawi, China, India, Maldives, Sri Lanka, Iran and so on (see, *e.g.* Breau, 2014; Charnock, Purcell & Ribera-Fumaz, 2012; Danjibo, 2013; Erde, 2014; Erdogan, 2013; Fadaee & Schindler, 2014; Greene & Kuswa, 2012; Gunter, 2013; Hoesterey, 2013; Iranzo & Farné, 2013; Jensen & Bang, 2013; Kerton, 2012; Musthaq, 2014; Pickerill & Krinsky, 2012).

However, the truly outstanding nature of these events is visible only with quantitative empirical data. In order to understand the true scale of the Arab Spring and its global echo consider Figures 2 and 3:

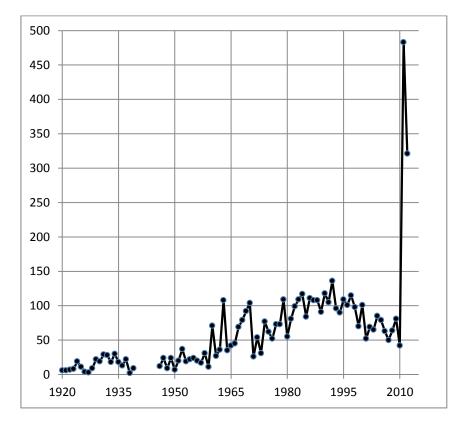


Fig. 2. Dynamics of the total number of major antigovernment demonstrations registered in the world annually as recorded in the CNTS¹⁴ database (1920–2012)

¹⁴ Cross-National Time Series Database.

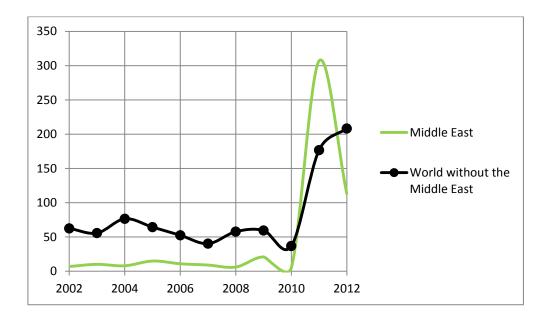


Fig. 3. Dynamics of the total number of major antigovernment demonstrations registered in the Middle East and the rest of the world annually as recorded in the CNTS database (2002–2012)

As it is seen, in 2011 the level of protest activity in the Middle East experienced a staggering leap by two orders of magnitude.¹⁵ However, in the rest of the world the increase in the level of protest activity in 2011–2012 though not as colossal as in the Middle East, was also very impressive – it grew almost by an order of magnitude.¹⁶

There are grounds to assume that in 2011-2012 the World-System experienced to some extent a phase transition to a qualitatively new state (let us denote it as *Phase Transition B*). This phase transition bears some resemblance to the one which the World-System experienced in the early 1960s (let us denote it as *Phase Transition A*).

In Fig. 2 the scale of Phase Transition A is somewhat diminished by the tremendous scale of Phase Transition B. So, in order to get a better understanding. it is reasonable to consider the same graph in logarithmic scale (see Fig. 4):

¹⁵ While in 2010 CNTS registered only 5 major antigovernment demonstrations in the Middle East, in 2011 this number rocketed up to 307.

¹⁶ While in 2010 CNTS registered only 37 major antigovernment demonstrations in the rest of the world, in 2011 this number increased to 208.

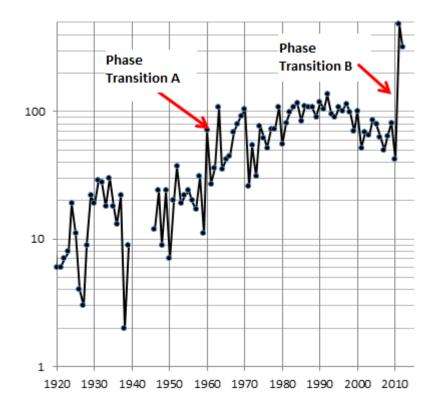


Fig. 4. Dynamics of the total number of major antigovernment demonstrations registered in the world annually as recorded in the CNTS database (1920–2012), logarithmic scale

The dynamics featured in Fig. 4 bears some resemblance to the dynamics of Kondratieff waves. Let us take a deeper look into this resemblance.

In 1920s Russian economist Nikolai Kondratieff observed that the historical record of some economic indicators then available to him appeared to indicate a cyclic regularity of phases of gradual increases in values of respective indicators followed by phases of decline (Kondratieff, 1922: ch. 5; 1925, 1926, 1935); the period of these apparent oscillations seemed to him to be around 50 years. This pattern was found by him with respect to such indicators as prices, interest rates, foreign trade, coal and pig iron production for some major Western economies (first of all England, France, and the United States), whereas the long waves in pig iron and coal production were claimed to be detected since the 1870s for the world level as well (note that as regards the production indices during decline/downswing phases we are dealing with the slowdown of production growth rather than with actual production declines that rarely last longer than 1-2 years, whereas during the upswing phase we are dealing with a general acceleration of the production growth rates in comparison with the preceding downswing/slowdown period [see, *e.g.*, Modelski, 2001, 2006 who prefers quite logically to designate 'decline/downswing' phases

as 'phases of take-off', whereas the upswing phases are denoted by him as 'high growth phases']).

Kondratieff noticed that 'during the recession of the long waves an especially large number of important discoveries and inventions in the technique of production and communication are made, which, however, are usually applied on a large scale only at the beginning of the next long upswing' (Kondratieff, 1935: 111).

One of the ways K-waves influence the social processes and shape social macro-events is through the emergence of principally new communication technologies corresponding to respective technological systems, each of which corresponds to a particular Kondratieff wave.

From our perspective, the first (after 1919) phase transition occurred in the early 1960s and was related to the growth of global informational connectivity after the World War II, as well as the improvement of the means of protest self-organization due to the spread of television, portable radio receivers, portable electric loud-speakers and other technologies of the Fourth Kondratieff Cycle (see, *e.g.*, Transistor Radios, 1999; Arceneaux, 2014).

Even though global informational connectivity was on the increase throughout the whole of the 1950s, the growth in protest activity occurred not in a smooth, but in a sharp way in the very beginning of the 1960s. Prior to Phase Transition A CNTS records about 20 to 30 major antigovernment demonstrations annually, while in the early 1960s this rate jumps up to 100.

After that in 1964–1966 (but especially after the peak of the late 1960s, in 1971–1973) there follows a notable decline. However, by the 1980s the level of global protest activity which seemed anomalous in the early 1960s becomes quite regular.

The two decades preceding the Arab Spring were marked by a perceptible decreasing trend in the level of global protest activity; in 2010 it reached the lowest values since the mid-1970s. However, even in 2010 it was notably higher than any value recorded in CNTS before 1960.

Phase Transition B was prepared by a new wave of growth of global information connectivity, as well as the improvement of the means of protest self-organization due to the spread of various technologies of the Fifth Kondratieff cycle (the Internet, satellite television, Twitter and other social networks, mobile telephony etc.). Once again, while the spread of these technologies was going on for many years before 2011, their internal colossal potential for generating and spreading protest activity was realized in one leap.

Let us note that the spread of these technologies and the surge of revolutionary moods

seem to share common pattern, which is stipulated by the dynamics of expectations:

In recent years a growing number of social science studies have pointed out the significance of expectations in science and technology innovation. Novel technologies and fundamental changes in scientific principle do not substantively pre-exist themselves, except and only in terms of the imaginings, expectations and visions that have shaped their potential. As such, future-oriented abstractions are among the most important objects of enquiry for scholars and analysts of innovation. Such expectations can be seen to be fundamentally 'generative', they guide activities, provide structure and legitimation, attract interest and foster investment. They give definition to roles, clarify duties, offer some shared shape of what to expect and how to prepare for opportunities and risks. Visions drive technical and scientific activity, warranting the production of measurements, calculations, material tests, pilot projects and models (Borup et al., 2006: 285-286).

These words can without almost any change be applied to the expectations of the revolutionaries – the regime they want to create does not pre-exist except in imagination, so future-oriented abstractions are crucially important in guiding their activities.

This makes us turn our attention to the Gartner's hype-cycle, which describes the dynamics of expectations of a certain innovation during the early stages of the innovation's life cycle (see, *e.g.*, Linden & Fenn, 2003; O'Leary, 2008; O'Leary, 2009; Jun, 2012; Lente, Spitters, & Peine 2013; Adamuthe, Tomke & Thampi, 2015; Sasaki, 2015, for more detail on Gartner's hype-cycles). Let us note that, according to Artemy Malkov's observation, the technologically stipulated dynamics of the protest activity during the previous phase transition somewhat resembles the dynamics of the new technologies expansion in the course of Gartner's Hype Cycle (see Fig. 5).

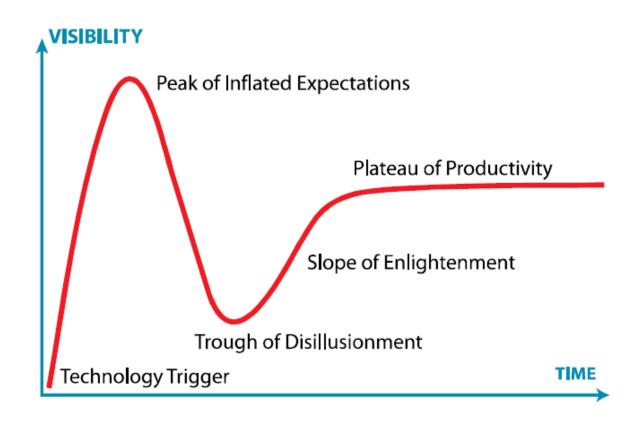


Fig. 5. Stylized graphic representation of the dynamics of the new technologies expansion in the course of Gartner's Hype Cycle

If this hypothesis is true, we are now in the second phase of this cycle, characterized by a notable decline in the level of protest activity. However, it will be very probably followed by a new (not such a dramatic one) phase of increase in the level of protest activity, after which its intensity will likely stabilize at the values lower than the 2011 peak, but still remarkably higher than the level of the first decade of this century.

Conclusion

There are grounds to conclude that in 2011–2012 the World-System experienced to some extent a phase transition to a brand new state of global protest activity (phase transition B). This transition phase appears to resemble with changes World-System experienced in the early 1960s (phase transition A).

The first (after 1919) phase transition occurred in the early 1960s and was related to the growth of global informational connectivity after the World War II, as well as the improvement of the means of protest self-organization due to the spread of television, portable radio receivers, portable electric loud-speakers, and other technologies of the Fourth Kondratieff Cycle.

Although the global information connectivity was growing all the 1950s the protest activity increase took place not gradually but abruptly at the beginning of the 1960s. Meanwhile CNTS registers 20-30 large anti-government demonstrations per year before the phase transition A, at the beginning of the 1960s this level jumps up to a hundred.

Then, during 1964-1966 (especially after the peak of the late 1960s – in 1971-1973) a noticeable decline could be marked. However, by the 1980s the level of global protest activity, that seemed anomalous in the early 1960s, had become quite normal.

In the last 20 years before the Arab Spring there was a decline tendency of the global protest activity and in 2010 it was the lowest since the mid-1970s. But even in 2010 it was higher than any recorded one by CNTS before 1960.

The phase transition of the early 2010s was prepared by a new wave of global informational connectivity growth as well as improvement of the means of protest self-organization due to spread of various technologies of the Fifth Kondratieff cycle (the Internet, satellite television, Twitter and other social networks, mobile telephony, etc.). Similarly to what was observed during the Fourth Kondratieff Wave, during the Fifth Cycle while the spread of these technologies was going on for many years before 2011, their colossal internal potential for generating and spreading protest activity was realized in one leap as a phase transition.

References

- Adamuthe, A., Tomke, J., & Thampi, T. (2015). An Empirical Analysis of Hype-cycle: A Case Study of Cloud Computing Technologies. *International Journal of Advanced Research in Computer and Communication Engineering*, 10(4), 316 – 323.
- Akaev, A. (2009). Sovremennyj finansovo-economicheskiy krizis v svete teorii innovatsionno-technologicheskogo razvitiya economiki i upravleniya innovatsionnym protsessom [Modern Financial and Economic Crisis in the Light of the Theory of the Economy's Innovative and Technological Development and Controlling of Innovative Process]. In: D. Khaltourina & A. Korotayev (Eds.), *Sistemnyj monitoring. Globalnoe I regionalnoe razvitie* [System Monitoring. Global and Regional Development] (pp. 230 258). Moscow: LIBROKOM. (in Russian)

Akaev, A., Sadovnichy, V., & Korotayev, A. (2011). Explosive Rise in Gold and Oil Prices as a Precursor of a Global Financial and Economic Crisis. *Doklady Mathematics*, 2(83), 1–4.

- Akaev, A., Sadovnichy, V., & Korotayev, A. (2012). On the dynamics of the world demographic transition and financial-economic crises forecasts. *The European Physical Journal*, 205, 355 – 373.
- Andreev, A. I., Ilyin, I. V., & Zinkina, Yu. V. (2015). Approaches and Paradigms in Defining the Essence of Globalization. In: L. E. Grinin, I. V. Ilyin, P. Herrmann & A. V. Korotayev (Eds.), *Globalistics and Globalization Studies: Big History & Global History*. Yearbook (pp. 110–118). Volgograd: 'Uchitel' Publishing House. (in Russian)
- Arceneaux, N. (2014). Small, Cheap, and out of Control. Reflections on the Transistor Radio. *The Routledge Companion to Mobile Media*. New York: Routledge.
- Arrighi, G. (1994). The Long Twentieth Century: Money, Power, and the Origins of Our Times. London: Verso.
- Attali, J. (1991). *Millennium: Winners and Losers in the Coming World Order*. New York: Times Books.
- Barber, L. (2014). Lionel Barber reviews Henry Kissinger's 'World Order'. *The Financial Times*, September 5. Retrieved from http://www.ft.com/intl/cms/ s/0/76fc7bb0-341e-11e4-8832-00144feabdc0.html.
- Beck, C. (2014). Reflections on the Revolutionary Wave in 2011. *Theory & Society*, 2(43), 197 223.
- Breau, S. (2014). The Occupy Movement and the top 1% in Canada. Antipode, 46(1), 13 33.
- Bremmer, I. (2015). Qué esperamos de EE UU? *El Pais*. June 12. Retrieved from http://elpais.com/elpais/2015/06/10/opinion/1433926870_545112.html.
- Brynen, R., Moore, P., Salloukh, B., & Zahar, M. (2012). Beyond the Arab spring: Authoritarianism & Democratization in the Arab World. Boulder, CO: Lynne Rienner Publishers.
- Brzezinski, Z. (1998). The Grand Chessboard: American Primacy and Its Geostrategic Imperatives. New York: Basic Books.
- Buchanan, P. J. (2002). The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization. New York: St. Martin's Griffin.
- Charnock, G., Purcell, T., & Ribera-Fumaz, R. (2012). ¡Indígnate!: The 2011 popular protests and the limits to democracy in Spain. *Capital & Class*, *36*(1), 3 11.

- CNTS. (2015). Cross-National Time Series Data Archive Coverage. Databank International. Retrieved from http://www.databanksinternational.com
- Colson, C., & Eckerd, J. (1991). Why America doesn't Work? Dallas: Word Pub Group.
- Danjibo, N. (2013). The Aftermath of the Arab Spring and Its Implication for Peace and Development in the Sahel and Sub-Saharan Africa. *Strategic Review for Southern Africa*, 35(2), 16-34.
- Dickson, D. (1983). Technology and Cycles of Boom and Bust. Science, 219(4587), 933–936.
- Downing, B. (1992). *The Military Revolution and Political Change*. Princeton, NJ: Princeton University Press.
- Erde, J. (2014). Constructing archives of the Occupy movement. *Archives and Records*, 35(2), 77–92.
- Erdogan, A. (2013). From the Collapse of Communism in Eastern Europe to the Arab Spring: Lessons for Democratic Transition. *Alternatives: Turkish Journal of International Relations*, 12(3), 17–31.
- Fadaee, S., & Schindler, S. (2014). The Occupy Movement and the Politics of Vulnerability. *Globalizations*, 11(6), 777–791.
- Frank, A. G. (1997). Asia Comes Full Circle With China as the 'Middle Kingdom'. *Humboldt* Journal of Social Relations, 76 (2), 7–20.
- Goldstein, J. (1988). Long Cycles: Prosperity and War in the Modern Age. New Haven, CT: Yale University Press.
- Goldstone, J. (2011). Understanding the Revolutions of 2011. Foreign Affairs, 3(90), 8–16.
- Goldstone, J. (2014). Revolutions. A Very Short Introduction. Oxford: Oxford University Press.
- Greene, R., & Kuswa, K. (2012). From the Arab Spring to Athens, From Occupy Wall Street to Moscow: Regional Accents and the Rhetorical Cartography of Power. *Rhetoric Society Quarterly*, 42(3), 271–288.
- Grinin, A. L., & Grinin, L. E. (2015). The Cybernetic Revolution and Historical Process. *Social Evolution and History*, *14*(1), 125–184.
- Grinin, L. E. (2007). Production Revolutions and Periodization of History: A Comparative and Theoretic-Mathematical Approach. *Social Evolution and History*, 6(2), 75–120.

- Grinin, L. E. (2009). The State in the Past and in the Future. *Herald of the Russian Academy of Sciences*, 79(5), 480–486.
- Grinin, L. E. (2010). Which Global Transformations would the Global Crisis Lead to? Age of *Globalization*, 2, 31–52.
- Grinin, L. E. (2011). Chinese Joker in the World Pack. *Journal of Globalization Studies*, 2(2), 7–24.
- Grinin, L. E. (2012a). Macrohistory and Globalization. Volgograd: 'Uchitel' Publishing House.
- Grinin, L. E. (2012b). New Foundations of International System or Why do States Lose Their Sovereignty in the Age of Globalization? *Journal of Globalization Studies*, *3*(1), 3–38.
- Grinin, L. E. (2013). The Tiger and the Dragon. Development Models and Perspectives of India and China. *Journal of Globalization Studies*, *4*(1), 5–31.
- Grinin, L., Issaev, L., & Korotayev, A. (2015). *Revolyutsii i nestabil'nost' na Blizhnem Vostoke* [Revolutions and Instability in the Near East]. Moscow: Moscow office of 'Uchitel' Publishing House. (in Russian)
- Grinin, L. E., & Korotayev, A. V. (2010a). Will the Global Crisis Lead to Global Transformations? 1. The Global Financial System: Pros and Cons. *Journal of Globalization Studies*, 1(1), 70–89.
- Grinin, L. E., & Korotayev, A. V. (2010b). Will the Global Crisis Lead to Global Transformations? 2. The Coming Epoch of New Coalitions. *Journal of Globalization Studies*, 1(2), 166–183.
- Grinin, L. E., & Korotayev, A. V. (2011). The Coming Epoch of New Coalitions: Possible Scenarios of the Near Future. *World Futures*, 67(8), 531–563.
- Grinin, L., & Korotayev, A. V. (2012a). Does 'Arab Spring' Mean the Beginning of World-System Reconfiguration? *World Futures. The Journal of Global Education*, 68(7), 471–505.
- Grinin, L. E., & Korotayev, A. V. (2012b). Tsikly, krizisy, lovushki sovremennoj Mir-Sistemy. Issledovanie kondrat'evskikh, zhyuglyarovskikh i vekovykh tsiklov, global'nykh krizisov, mal'tuzianskikh i postmal'tuzianskikh lovushek [Cycles, crises, traps of the modern World System. Study of the Kondratieff, Juglar and secular cycles, global crises, Malthusian and post-Malthusian traps]. Moscow: LKI/URSS. (in Russian)

- Grinin, L. E., & Korotayev, A. V. (2014). Globalization Shuffles Cards of the World Pack: In Which Direction is the Global Economic-Political Balance Shifting? *World Futures*, 70(8), 515–545.
- Grinin, L. E., & Korotayev, A. V. (2015). *Great Divergence and Great Convergence. A Global Perspective*. Springer International Publishing.
- Gunter, M. (2013). The Kurdish Spring. Third World Quarterly, 34(3), 441-457.
- Haass, R. N. (2008). The Age of Nonpolarity. What will Follow U.S. Dominance. *Foreign Affairs*, May/June. Retrieved from https://www.foreignaffairs.com/articles/united-states/2008-05-03/age-nonpolarity
- Herland, H. N. (2014). Kronikk: USA begår overgrep i Midtøsten. Retrieved from http://www.aftenposten.no/meninger/kronikker/Kronikk-USA-begar-overgrep-i-Midtosten-7724443.html
- Heuvel, K. vanden (2015). Rethinking the Cost of Western Intervention in Ukraine. Washington Post. Retrieved from https://www.washingtonpost.com/katrina-vanden-heuvel/2011/02/24/ABMj4XN_viewAll.html
- Hoesterey, J. (2013). Is Indonesia a Model for the Arab Spring? Islam, Democracy, and Diplomacy. *Review of Middle East Studies*, 47(1), 56–62.
- Iranzo, A., & Farné, A. (2013). Occupy Movements in the Media. *Peace Review*, 25(3), 384–391.
- Jensen, M., & Bang, H. (2013). Occupy Wall Street: A new political form of movement and community? *Journal of Information Technology & Politics*, *10*(4), 444–461.
- Jourdon, Ph. (2008). La monnaie unique europeenne et son lien au developpement economique et social coordonne: une analyse cliometrique. Thèse. Montpellier: Universite Montpellier I.
- Jun, S.-P. (2012). A Comparative Study of Hype Cycles Among Actors Within the Socio-Technical System: With a Focus on the Case Study of Hybrid Cars. *Technological Forecasting and Social Change*, 79, 1413–1430.
- Kennedy, P. (2008). Is this the End of the American Era? *The Sunday Times*, October 12. Retrieved from http://www.thesundaytimes.co.uk/sto/news/world_news/article241555.ece.
- Kerton, S. (2012). Tahrir, here? The influence of the Arab uprisings on the emergence of Occupy. Social Movement Studies, 11(3–4), 302–308.

Khosrokhavar, F. (2016). New Arab Revolutions That Shook the World. New York: Routledge.

- Kissinger, H. (1994). Diplomacy. New York: Simon & Schuster.
- Kissinger, H. (2001). Does America Need a Foreign Policy? Toward a Diplomacy for the 21st Century. New York: Simon & Schuster.
- Kissinger, H. (2014). World Order. New York: Penguin Press.
- Klare, M. T. (2015). America's Days as a Global Superpower are Numbered. Now What? The First Step is to Accept the Fact that American Power is Limited and Global Rule is an Impossible Fantasy. *The Nation*, May 28. Retrieved from http://www.thenation.com/article/ameri-cas-days-global-superpower-are-numbered-now-what.
- Kondratieff, N. (1922). Mirovoe khozyaistvo i ego kon"yunktura vo vremya i posle voiny [World Economy and its Conjuncture during and after the War]. Vologda: Regional Branch of the State Publishing House. (in Russian)
- Kondratieff, N. (1935). The Long Waves in Economic Life. *The Review of Economic Statistics*, 6(17), 105–115.
- Korotayev, A., Grinin, L. (2012). Kondratieff waves in the World-System perspective. *Kondratieff Waves*, *1*, 23–64.
- Korotayev, A. V., Issaev, L. M., Malkov, S. Y., & Shishkina, A. R. (2013). Developing the Methods of Estimation and Forecasting the Arab Spring. *Central European Journal of International and Security Studies*, 7(4), 28–58.
- Korotayev, A. V., Issaev, L. M., Malkov, S. Y., & Shishkina, A. R. (2014). The Arab Spring: A Quantitative Analysis. *Arab Studies Quarterly*, *36*(2), 149–169.
- Korotayev, A., Issaev, L., & Shishkina, A. (2016). Egyptian Coup of 2013: an 'Econometric' Analysis. *The Journal of North African Studies*, *3*(21), 341–356.
- Korotayev, A. V., Issaev, L. M., & Vasil'ev, A. M. (2015). Kolichestvennyj analiz revolyutsionnoj volny 2013-2014 gg. [Quantitative analysis of the revolutionary wave of 2013-2014]. *Sotsiologicheskie issledovaniya* [Sociological Research], 8, 119–127.
- Korotayev, A., & Tsirel, S. (2010). A Spectral Analysis of World GDP Dynamics: Kondratieff Waves, Kuznets Swings, Juglar and Kitchin Cycles in Global Economic Development, and the 2008–2009 Economic Crisis. *Structure and Dynamics*, 1(4), 3–57.
- Korotayev, A., & Zinkina, J. (2011). Egyptian Revolution: A Demographic Structural Analysis. *Entelequia. Revista Interdisciplinar. 13*, 139–169.

- Korotayev A. V., Zinkina J., & Bogevolnov J. (2011). Kondratieff Waves in Global Invention Activity (1900–2008). *Technological Forecasting and Social Change*, 78, 1280–1284.
- Korotayev, A., Zinkina, J., Kobzeva, S., Bozhevolnov, J., Khaltourina, D., Malkov, A., & Malkov, S. (2011). A Trap at the Escape from the Trap? *Demographic-Structural Factors* of Political Instability in Modern Africa and West Asia. Cliodynamics, 2(2), 276–303.

Kupchan, Ch. A. (2002). The End of the American Era. New York: Knopf.

- Lang, J., & De Sterck, H. (2014). The Arab Spring: A Simple Compartmental Model for the Dynamics of a Revolution. *Mathematical Social Sciences*, 69, 12–21.
- Linden, A., & Fenn, J. (2003). Understanding Gartner's Hype Cycles. In: *Strategic Analysis Report N*^o*R*-20-1971. Gartner, Inc.
- Linstone, H. 2006. The Information and Molecular Ages: Will K-Waves Persist? In: T. Devezas (Ed.), *Kondratieff Waves, Warfare and World Security* (pp. 260–269). Amsterdam: IOS Press.
- Lynch, M. (2014). Media, Old and New. In: M. Lynch (Ed.), *The Arab uprisings explained: New contentious politics in the Middle East* (pp. 93–110). New York: Columbia University Press.
- Mandel, E. (1980). *Long Waves of Capitalist Development*. Cambridge, UK: Cambridge University Press.
- Mandelbaum, M. (2005). *The Case for Goliath: How America Acts as the World's Government in the Twenty-First Century*. New York: Public Affairs.
- McNeill, W. H. (1982). The Pursuit of Power. Technology, Armed Force and Society since A.D. 1000. Chicago, IL: University of Chicago Press.
- Milne, S. (2008). Georgia is the Graveyard of America's Unipolar World. *The Guardian*, August 28. Retrieved from

https://www.theguardian.com/commentisfree/2008/aug/28/russia.usforeignpolicy

Modelski, G. (2001). What Causes K-waves? *Technological Forecasting and Social Change*, 68, 75–80.

- Modelski, G. (2006). Global Political Evolution, Long Cycles, and K-Waves. In: T. Devezas (Ed.), *Kondratieff Waves, Warfare and World Security* (pp. 293–302). Amsterdam: IOS Press.
- Modelski, G., & Thompson, W. (1996). *Leading Sectors and World Politics: The Coevolution of Global Politics and Economics*. Columbia, SC: University of South Carolina Press.

- Moore E. (2012). Was the Arab Spring a Regional Response to Globalization? *E-International Relations*, July 2. Retrieved from http://www.e-ir.info/2012/07/02/was-the-arab-spring-a-regional-response-to-globalisation/ (accessed 19.12.2015).
- Musthaq, F. (2014). Tumult in the Maldives. Journal of Democracy, 25(2), 164-170.
- Nepstad S. E. (2011). Nonviolent Resistance in the Arab Spring: The Critical Role of Military-Opposition Alliances. *Swiss Political Science Review*, *17*(4), 485–491.
- National Intelligence Council. (2008). *Global Trends 2025:* A Transformed World. Washington, DC: National Intelligence Council. Retrieved from https://fas.org/irp/nic/2025.pdf
- National Intelligence Council. (2012). Global Trends 2030: Alternative Worlds. Washington,DC:NationalIntelligenceCouncil.Retrievedfromhttps://fas.org/irp/nic/global_trends_2030.pdf
- O'Leary, D. (2008). Gartner's Hype Cycle and Information System Research Issues. International Journal of Accounting Information Systems, 9, 240–252.
- O'Leary, D. (2009). The Impact of Gartner's Maturity Curve, Adoption Curve, Strategic Technologies on Information Systems Research, with Applications to Artificial Intelligence, ERP, BPM, and RFID. *Journal of Emerging Technologies in Accounting*, *1*(6), 1–3.
- Pantin, V., & Lapkin, V. (2006). Filosofiya istoricheskogo prognozirovaniya: ritmy istorii I perspectivy mirovogo razvitiya v pervoi polovine XXI veka [The Philosophy of Historical Forecast: The Rhythms of History and Perspectives of the World Development in the First Half of the 21st Century]. Dubna: Feniks+. (in Russian)
- Pickerill, J., & Krinsky, J. (2012). Why does Occupy matter? *Social Movement Studies*, *11*(3–4), 279–287.
- Sasaki, H. (2015). Simulating Hype Cycle Curves With Mathematical Functions: Some Examples of High-Tech Trends in Japan. *International Journal of Managing Information Technology*, 2(7), 1–12.
- Spruyt, H. (2000). The End of Empire and the Extension of the Westphalian System: The Normative Basis of the Modern State Order. *International Studies Review*, 2(2), 65–92.
- Tausch, A. (2006). Global Terrorism and World Political Cycles. In: L. Grinin, V. C. de Munck & A. Korotayev (Eds.), *History & Mathematics: Analyzing and Modeling Global Development* (pp. 99–126). Moscow: KomKniga/URSS.

- Thompson, W. (2007). The Kondratieff Wave as Global Social Process. In: G. Modelski, & R. Denemark (Eds.), World-System History, Encyclopedia of Life Support Systems, UNESCO. Oxford: EOLSS Publishers.
- Tisdall, S. (2008). America's Fall is a Dangerous Opportunity for its Enemies. *The Guardian*, October, 6. Retrieved from http://www.theguardian.com/commentisfree/2008/oct/06/tisdallbriefing.usa.
- Todd, E. (2003). *After the Empire: The Breakdown of American Order*. New York: Columbia University Press.
- Toska, S. (2015). Protest Mobilization in the Age of Twitter. In: F. al-Sumait, N. Lenze & M. Hudson (Eds.), *The Arab Uprisings. Catalysts, Dynamics, and Trajectories* (pp. 135–154). Rowman and Littlefield.
- TransistorRadios.(1999).PBSOnline.Retrievedfromhttp://www.pbs.org/transistor/background1/ events/tradio.html (accessed 20.11.2015).
- Van Duijn, J. (1983). The Long Wave in Economic Life. Boston: Allen and Unwin.
- Wallerstein, I. (1984). Economic Cycles and Socialist Policies. Futures, 6(16), 579–585.
- Wallerstein, I. (2003). The Decline of American Power. The U.S. in a Chaotic World. New York: The New Press.
- Weyland, K. (2012). The Arab Spring: Why the Surprising Similarities with the Revolutionary Wave of 1848? *Perspectives on Politics*, *10*(4), 917–934.
- Wilson, A. (2013). On the Margins of the Arab Spring. Social Analysis: The International Journal of Social and Cultural Practice, 57(2), 81–98.

Zakaria, F. (2008). The Post-American World. New York: W.W. Norton & Co.

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