

Russia in the Epicenter of Geopolitical Turbulence: Accumulation of Global Contradictions



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Abstract. The article examines the situation of Russia falling into the epicenter of geopolitical shifts in 2022, when the country found itself involved in the hybrid warfare with the Collective West. The novelty of our approach consists in reconstructing key events of the geopolitical competition of the last 15–20 years with the use of an extensive range of related concepts from various fields: economics (Trout’s mistake, neocolonialism), cybernetics (Ashby’s Law and Sedov’s Law), management (external management, hybrid warfare), synergetics (synergetic effect, system complexity), political science (security, freedom, power structure), political economy (Arrighi’s cycles of capital accumulation, global capital center, rate of return), institutionalism (shifting risks from the physical world to the social world), geography (horizontal diffusion of innovations), psychology (war of meanings, war of nerves). This made it possible to bring together many poorly compatible phenomena of different nature, synthesize the concepts used and reveal the logic behind the struggle of geopolitical players for world hegemony. To deepen the analysis, we provide our own typology of world wars and their characteristics. We prove that the special military operation in Ukraine exposed the impasse of Russia’s economic policy and consolidated other countries in a hybrid war against the United States, thereby becoming a key event in history and giving rise to a global geopolitical confrontation between the West and the Non-West. Our main conclusion is that Russia has objectively found itself in the epicenter of geopolitical turbulence, and, consequently, cannot avoid a direct collision with the Collective West; therefore, over the next 15–20 years the country will have to go through all the stages of a new hybrid world war.

Key words: geopolitical turbulence, world capital center, competition, war, world economic system.

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Introduction

In 2022, contradictions that had accumulated between the Collective West and Russia, as well as within the Russian Federation itself, boiled over into Russia’s special military operation (SMO) in Ukraine. Today it is already clear that the SMO is not a confrontation between the two states – Russia and Ukraine, but the break-up of a consensus on previous agreements on the division of the world. In this regard, the military conflict has served as a kind of trigger for curtailing globalization and establishing regional geopolitical blocs of countries. It is quite obvious that the scale of the forces that have come into motion will lead to a revision of the former world order and formation of a new geopolitical configuration. At the same time, many aspects of the ongoing shifts are not yet fully clear and difficult to understand because the world system is entering a transitional stage that is commonly called the regime of *global turbulence* and that is characterized by the instability of many processes and the unfinished nature of all social mechanisms of interaction between participants in the global political market.

The SMO, a major event of the last decades, has exposed many hidden strategies of the West, Russia and other global players in the global political space; this urges us to reconsider a large segment of world history and produce new social knowledge capable of explaining the events of the present and future on a systems basis. This task goes beyond the scope of social science alone, and we implement it in the series of three papers. In this article, which is the first one in the series, we consider the period from 1945 to 2022, during which the contradictions of the post-war system of the world order were gradually accumulating. Our approach consists not only in

a new interpretation of the events and processes under consideration, but also a new explanation of the causes of their occurrence and the logic of their course.

World wars: a new chronology and reconstruction of events

Russia in its various forms – the Russian Empire, the USSR or the current Russian Federation – has been one of the main players in the global geopolitical space (GGPS) for the last 200 years at least. It is not surprising that in 2022, through the SMO, it was Russia that initiated de-globalization of the GGPS (Ilyin, Morev, 2022). Let us consider the genesis of this event.

The traditional chronology and understanding of world wars is as follows: the First World War took place in 1914–1918, the Second World War in 1939–1945. From that moment on, humanity has been anxiously waiting for the Third World War. However, at present there are two premises that are becoming increasingly important and allow us to look at the world in a different way. The first one is that war never comes to an end, and therefore “the history of all hitherto existing societies has been the history of wars and military art” (Devyatov, 2020a, p. 11). The second premise is connected with the evolution of the phenomenon of war itself, namely with the final crystallization of its new form – hybrid war (Komleva, 2017). Today, the hybrid war is a *war of meanings and nerves* and aims to “stupefy the national elites and desecrate (dehumanize) the masses” (Devyatov, 2020b, p. 83). Accordingly, the task of the *war of meanings* is to destroy the culture of the enemy people – their traditional outlook, ethical and aesthetic coordinates, values, faith and other elements of the worldview. The task

of the *war of nerves* is to get the fastest and most accurate reaction of their forces to control signals and, conversely, to slow down the enemy's reaction by means of apathy or exhausting destructive excitement (Devyatov, 2020b, p. 159). Hybrid war is informational in its essence, its "blows" are embedded in the national economy and culture, violating their original format and the direction of their evolution.

If these conceptual provisions are not taken into account, then it becomes almost impossible to adequately describe the post-war development of the world. If we accept these clarifications, we will get the following chronology of world wars: 1914–1918 – the First World War (hot); 1939–1945 – the Second World War (hot); 1945–1991 – the Third World War (cold); 2014 – present day – the Fourth World War (hybrid). The *Table* shows the features of these four world wars, followed by certain comments.

First, the First and Second world wars were *hot* wars, i.e. their goal was to physically destroy the enemy – its manpower and infrastructure. At the same time, the level of technological development of mankind in the First World War did not yet allow for the total destruction of the enemy, whereas in the Second World War, which ended with the test of an atomic bomb, it was already possible. After the United States of America tested an atomic bomb, the Third World War began almost immediately when the confrontation between the established two centers of power – the United States and the USSR – was global, because it covered the world capitalist and socialist systems and took the form of a military-technological competition. The objectives

of this period were to create more advanced weapons of mass destruction and discredit the very essence of the enemy's social system. This implied a *war for the minds* of the population of the enemy country and inflicting maximum damage on its economy. That is why we can talk about the *hybrid nature* of the Third World War, which was limited in terms of the scale of the confrontation due to the limited capabilities of information systems of that time.

Second, during the Third World War, its important feature was revealed – it is not officially declared by anyone, but its end, just like in an ordinary hot war, is marked by the victory of one side and the defeat of the other, with all the consequences that follow. This is exactly what happened in 1991, when the Soviet Union, represented by its leadership, admitted defeat in the Cold War and was subjected to post-war reparations in a new and modified form that, however, does not alter their essence. We will discuss this aspect in more detail in the next section.

Third, the four known world wars make up two evolutionary stages of world history – hot and cold (hybrid). The contradictions accumulated in the world capitalist system by 1914 required a radical change in the world order, which could not be done through the First World War, and therefore demanded its recurrence in 1939. In 1945, there was an actual dramatic change in the world order; two global centers of power emerged, the United States and the USSR; and when after 1949 they acquired advanced nuclear forces of mass destruction, hot wars became ineffective and meaningless. However, the main transformational result of the two hot wars was achieved – the "irritation factor" represented

Features of world wars

Name	Period	Nature	Type
First World War	1914–1918	Hot (armed)	Limited
Second World War	1939–1945		Total
Third World War	1945–1991	Hybrid (cold)	Limited
Fourth World War	2014 – present		Total

Source: own elaboration.

by Germany was suppressed, and the center of the world shifted from Eurasia (Eastern Hemisphere) to North America (Western Hemisphere), which marked a qualitatively new order in the GGPS.

Fourth, the duration of world wars is increasing, especially the duration of hybrid wars. So, the First World War lasted four years, the Second – six years, and the Third – 46 years. There are grounds to assume that the Fourth World War, which has been going on for eight years already, will drag on for another 15–20 years. Such changes in the duration of the wars are due to non-violent and indirect clashes of competing states. The “war of minds” and the “war for minds”, which constitute the essence of hybrid wars, are conducted by peaceful means in the technological and information space; as for local hot conflicts, they have an indirect form and arise, as a rule, in third countries. In this regard, the SMO is a classic manifestation of a *proxy war* – since 2014, the United States has been preparing Ukraine for a hot war with Russia by inciting nationalist feelings of the Ukrainian population and misinforming the world community about the true events in the region.

Fifth, the U.S. victory in the Third World War was not final, just as the results of the First World War were not satisfactory. While Germany lost the First World War, but remained a major political actor in Eurasia – the circumstance requiring Germany to be “finished off” during the Second World War, then after the Third World War, the USSR lost, but remained – in the form of the Russian Federation – a formidable force in the GGPS; ultimately, this became clear after the 2014 accession of Crimea to the Russian Federation, when the country demonstrated the possibility of restoring its former power. This led to the escalation of military actions by the Collective West for the final “elimination” of the Russian factor in world politics; this move was embodied in the undeclared Fourth World War, which began in the form of local hot clashes on the territory of Ukraine in 2014. From 2022, the hybrid

war became total and absolutely uncompromising. From the point of view of the Collective West led by the United States, this war can only end with the complete destruction of the cultural identity of Russia and the peoples living on its territory, after which an absolute hegemony of Western ideology will be established.

The latter premise needs some explanation. Thus, according to Samuel Huntington, after the collapse of the Soviet Union in 1991, the confrontation of global ideologies disappeared, and instead there should come a war of civilizations as some isolated and irreconcilable communities with different cultural and religious foundations (Huntington, 2021). However, today the fallacy of this concept has become quite obvious. Huntington spoke about the ideological opposition Capitalism/Communism; however, today it has become clear that the division runs along a different border – West/Non-West. That is why, after the introduction of unprecedented international sanctions against Russia in 2022 by the collective West, a Non-Western alliance of Islamic Iran, Sinic China and Orthodox Russia was formed. Thus, the ideological confrontation remained, but now it was different from the dimension it had assumed after the Second World War. In public discourse, it sometimes appears in a wide variety of pairs of oppositions – Globalists/Nationalists, Democrats/Siloviki, Liberals/Narodniks, etc. Consequently, the Fourth World War should lead either to the final victory of the Western worldview globally, which will automatically make the world institutionally and culturally more homogeneous than it has ever been before, or to the victory of the idea of national identity with ongoing contradictions and local wars, but on a different technological basis. This dichotomy has a geopolitical tone – the further evolution of world civilization will be determined either in the New World (in North America and the Western Hemisphere), or still in the Old World (in Eurasia and the Eastern Hemisphere). In this

regard, we should mention that back in the late 1940s Arnold Toynbee wrote about the “unification of the world” in the course of social evolution (Toynbee, 2011, p. 66).

The all-encompassing nature of the current Fourth World War is manifested in the dominance of the West in the information sphere and in the full-fledged use of this advantage against Russia. In fact, all information channels controlled by the West have turned to outright falsification of facts; this, however, does not reduce the strength and effectiveness of this weapon of mass destruction used against the consciousness of the masses. The intrigue of the global clash is how quickly and effectively the countries of the Non-Western bloc will be able to organize resistance on the information front. Let us recall two important facts in this regard: the Soviet Union, inferior to Germany in military technology at the beginning of World War II, surpassed it at the end of the war; China has already taken control of the information space today: it cuts short the unwanted signals from the West and thereby preserves its own ideological integrity and cultural identity. This clearly indicates that further events are unpredictable, which constitutes the intrigue of the modern historical moment.

World wars, Trout’s mistake and the phenomenon of neocolonialism

After the end of the Second World War in 1945, there was an unspoken consensus in the world regarding the punishment of the defeated countries. Already by the middle of the 20th century, a phenomenon called *Trout’s mistake* began to manifest itself in the GGPS: in the context of global competition, any serious mistake made by the actor becomes fatal (Balatsky, 2011). We recall that, according to Jack Trout, companies that achieved success in the mid-20th century functioned, as a matter of fact, in greenhouse conditions, making a lot of mistakes and quickly correcting them; in the 21st century any business mistake becomes fatal – the market punishes it

most severely, causing the ruin and closure of the company (Trout, 2009, pp. 12–13).

As it turned out, on a national scale, Trout’s mistake fully manifested itself already by the mid-20th century. At the state level, the Trout effect can be formulated as follows: *to a country that was defeated in a world war, this event becomes fatal, because this country is forever deprived of the right to political sovereignty*. This provision is true, first of all, in relation to the countries that lost the Second World War. Let us look at the fate of Germany after 1945: it was divided into two parts, one of which came under the patronage of the United States, and the other – the USSR. From that moment on, Germany’s political sovereignty was lost virtually forever – until now. Moreover, the identity of Germans, if not completely suppressed, was greatly leveled through the education their youth got that instilled in them a sense of guilt for the atrocities committed by their ancestors. And neither the restoration of Germany’s unity in 1990, nor the collapse of the USSR in 1991 brought back its political sovereignty: today, its territory is covered by a network of U.S. military bases, and its economy does not have strategically important industries like rocket engineering, civil aircraft construction, shipbuilding, and electronic industry that produces electronic circuit boards. Thus, the example of Germany shows that the defeated country is taken completely under the control of the victorious country that pursues a *policy of selective prohibition*, under which an unspoken veto is imposed on strategically important industries and activities. A similar policy was pursued with regard to Japan – two atomic bombs were dropped on it, the country itself went under the patronage of the United States, and the strategic functionality of its economy was also reduced; the youth educational policy in Japan has led to the fact that today a significant part of the Japanese population believes that it was the Soviet Union that dropped atomic bombs on their country. A similar fate befell Korea, which was

divided into communist North Korea and capitalist South Korea; the U.S. tried to implement a similar scenario in Vietnam. In post-war China, as a result of the 1945–1950 civil war and the victory of the Communist Party, Taiwan was autonomized and fell under the patronage of the United States.

Let us now consider in more detail the policy of fragmenting the defeated countries, which originates in the ancient Roman “divide and rule” principle. The effectiveness of this approach for a winner country has already been confirmed both theoretically and empirically. Thus, theoretically, making a defeated state weaker by fragmenting its territory means destroying the *synergetic effect* by severing the ties between its individual fragments (parts); it is illustrated mathematically by the disappearance of the systemic effect in the balance ratio of the country’s potential. Empirically, it has been proven on the example of the former republics of the USSR, where after 1991 for 31 years there was not a single case of significant economic achievements: depopulation developed in the splinter countries, foreign debt dependence grew, military conflicts erupted, etc. (Gusev et al., 2022).

The above indicates that after the Second World War the phenomenon of colonialism was revived in a modified form – the defeated countries were divided into parts which were deprived of political sovereignty and de facto fell under the *external control* of the victorious country without a statute of limitations, i.e. virtually forever. It is the very system of post-war *neocolonialism*, when the state defeated in the war was deprived of chances for further full-fledged development.

In the context of what has been said, we find it appropriate to recall that the practice of banning the development of a competitor state has always been one of the main ways of geopolitical confrontation and maintaining order, beneficial to the hegemon country. Thus, according to Daniel Arnaud, already in the first millennium BC the Assyrians considered it unacceptable that states should be formed on the

territory of hostile tribes: if intelligence informed them of such a threat, a military expedition was sent to the neighboring territory and devastated it to such an extent that any state formation there became impossible for centuries (Arno, 2009, p. 29). Essentially, nothing changed in the 20th century: the means for maintaining a geopolitical monopoly have been only slightly modified.

The above explains the essence of the metamorphoses of the USSR after 1991. The Soviet Union lost the Third World War, admitted defeat and signed an act of surrender in 1991 in the form of the Belavezha Accords, according to which Russia, Belarus and Ukraine recognized the fact of the termination of the existence of the USSR as a subject of international law and geopolitical reality. After that, the country was divided into 15 “independent” splinter countries, each of which, with the exception of Belarus, came under direct external control (Volkonsky, 2021). It was organized through *networks of Western emissaries* created in the splinter countries and covering national governments. Emissaries, as was done at all times in the comprador power elites, were recruited from citizens of the splinter countries, who, as a rule, were trained and interned in the West and later placed in key government posts. Subsequently, Western emissaries adopted state decisions based on the policy of selective prohibition in coordination with the center represented by authorized persons from the United States. Thus, all the splinter countries were successfully drawn into the orbit of U.S. political interests.

The post-Soviet space was reorganized in such a way that all the nuclear forces of the USSR were localized in Russia. Thus, the rest of the countries turned out to be de facto defenseless and unable to defend their political sovereignty. The only exception was the Russian Federation, which after the collapse of the Union remained the only risk factor in the region and therefore continued to remain under the close attention of the West,

whose goal was to further divide the country into several (or many) small states with their final demilitarization. This motive – final destruction of a potential competitor – became the dominant one for the U.S. administration for the next 32 years. The West achieved great success on this path during Boris Yeltsin’s presidency, when the country was deprived of high-tech industries and advanced science and education, after which it found itself on the verge of further fragmentation. However, the *logic of self-organization* of a large nation slowed down this process. In the most general terms, this is what followed next. Representatives of the Russian security services, anticipating their own extermination as a class if the course of Boris Yeltsin were to be maintained, organized opposition to the emissaries of the West. As a result, in 2000, the post of the RF President was occupied by Vladimir Putin as a consensual figure; the choice did not completely suit either the security forces or the globalists, but it did not provoke utter rejection on their part. From this moment begins a long period of balancing the interests of the two centers of forces, which have received different names – Siloviki/Liberals, Nationalists/Globalists, etc.; the political balance was partially disrupted in 2014, when a conflict in the field of military security was resolved by the accession of Crimea to Russia.

Prior to the period stated above, the neocolonial policy of selective prohibition proved highly effective. The proof is found in many facts that contradict economic logic: the inability of a country that had the most advanced civil aircraft 10–15 years ago to restore this production to a decent level; chronic failures in establishing the production of electronic chips, which Taiwan, South Korea and China did from scratch almost at the same time, etc. This is due to the fact that the policy of selective prohibition pursued against Russia by the Western emissaries is initially based on the principle of destruction rather than creation; this simplifies public administration to the limit: what you should

do is not *force* people to do something extraordinary (which is very difficult (!)), but *forbid* them to do it (which is very simple (!)). In other words, the entire Russian system of public administration for 23 years has encouraged not the rise of the domestic economy, but its degradation. It is not surprising that this state of affairs led to a colossal increase in social discontent and tension in almost all segments of the Russian population; sooner or later such a situation had to come into the open. This protest in 2014 took the form of a peaceful integration of Crimea into the Russian state; this triggered the Fourth World War and urged the West to become even more active in facilitating the collapse of the Russian Federation; in 2022, this conflict turned into a hot form on the territory of Ukraine.

A classic illustration of how neocolonialism works can be found in the description by Leonid Shebarshin, former head of the First Main Directorate of the KGB of the USSR, of a conversation with the Minister of Natural Resources of Pakistan, and later with Zulfikar Ali, Minister of Foreign Affairs, in 1961: “America that has been holding Pakistan with a stranglehold of military and food aid ..., that has established its bases here with weapons aimed at the Soviet Union, America that has been bribing the Pakistani bureaucracy and military...” “It was from a U.S. base in Badaber, Pakistan, that the infamous U-2 spy plane piloted by Powers recently took off. The plane was shot down over the Soviet Union and an unprecedented international scandal broke out...” (Shebarshin, 2017, p. 40). “Many high posts in Pakistan are held by American paid agents who spy on [Field Marshal] Ayub Khan’s every move, who control all the actions of the government” and interfere with its attempts to “establish good-neighborly relations with India” (Shebarshin, 2017, p. 41). After 1991, this template of neocolonialism was applied to Russia without any alterations.

The above leads to the conclusion that the history of sovereign Russia, strictly speaking, begins

on February 24, 2022 when the special military operation was launched; only at that moment the supreme power of the country in its principled decisions was able to finally free itself from the influence of the West. Until that date, the Russian Federation has been a new resource-supplying colony of the West. The tragedy of neocolonialism for Russia is that this fate befell it when most of the former colonies not only won their sovereignty, but also began to claim the role of leaders. For example, A. Toynbee back in 1947 in search of a “third great power” capable of balancing the situation of confrontation between the U.S.A and the USSR, said that it was “certainly not in China or India; for, in spite of their ancient civilizations and their vast populations, territories, and resources, these two mammoths are most unlikely to prove able to exert their latent strength during the critical period of history that lies, we may guess, immediately ahead of us” (Toynbee, 2011, p. 136). The critical period of history, estimated at 75 years, has passed, and India, China, Iran and Pakistan have overcome the burden of neocolonialism and gained the long-awaited sovereignty, and with it the necessary military and economic power. That is why these four countries ignore the calls of the United States to impose sanctions against Russia; instead they continue to cooperate with it, persistently pursuing their own interests.

It should be noted that these countries have been striving hard and for a long time in order to gain independence. To realize how much effort they spent, let us turn again to the testimony of L. Shebarshin: “Careful thought, pragmatism with a fair amount of cynicism, strict consideration of state interests – all this constitutes the steel core of Indian politics, disguised by garlands of flowers, piles of philosophical treatises and fountains of high-flown rhetoric. The ability of Indians to achieve their goals cannot but inspire respect and even envy. They have a civilization of five thousand years behind them” (Shebarshin, 2017, p. 80).

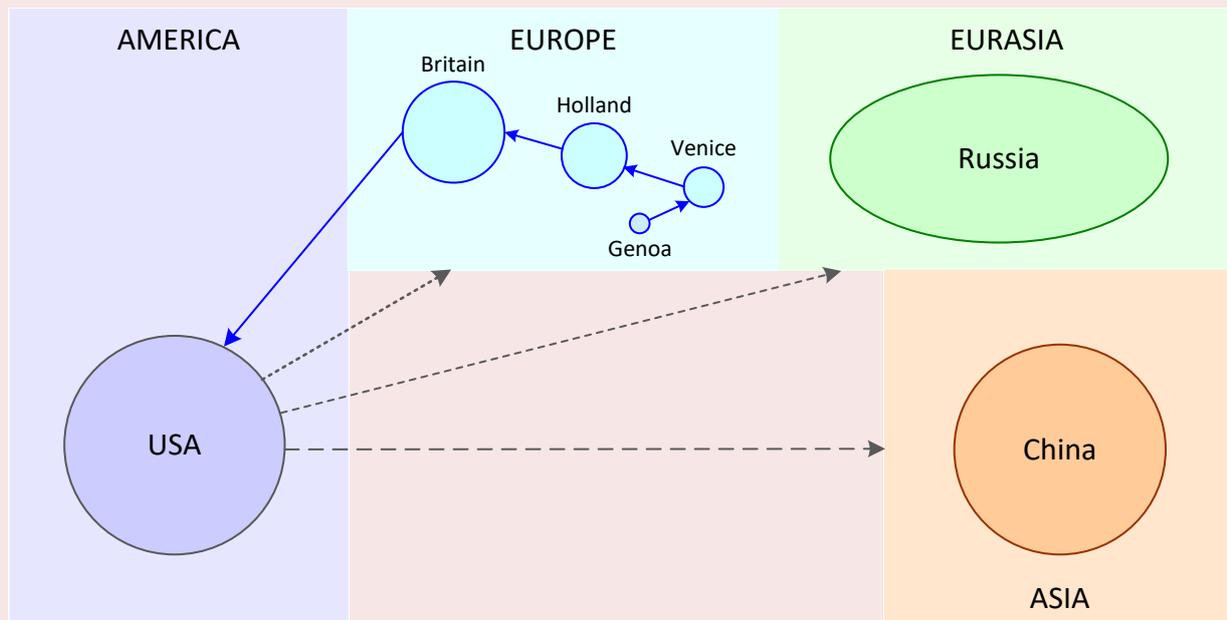
Let us draw some preliminary conclusions. The Second World War ended with the self-destruction of Europe: Germany ceased to be an “irritation factor”, and the rest of the European countries did not possess the critical power to have an effective say in world politics. The center of power shifted to the Western Hemisphere, to the New World, to North America. The alternative center of power represented by the USSR had some features of the Eurasian civilization, and the very confrontation of the two centers took the form of military, technological and ideological confrontation of the colossuses. This antagonism and the Third (Cold) World War resulted in the defeat of the USSR and its radical weakening in the form of its main fragment – the Russian Federation. The inoffensiveness of Russia after 1991 was largely maintained through the system of neocolonialism, when, while being formally independent, the country was under external control and moved in an orbit of interests of the metropolitan country, the United States. However, internal processes in Russia aimed at gaining sovereignty led to a “political demarche” in 2014 by reintegrating Crimea, which provoked the Fourth (hybrid) World War. The 2022 special military operation finally made Russia “ungovernable” for the West; as a consequence, unprecedented international sanctions were introduced against Russia thanks to the complete “submission” of European countries (plus Japan) to the dictation of the United States. The greatest loyalty to the United States was demonstrated by Germany, which adopts decisions that are useful to the mother country, but harmful, if not murderous (!), to its own economy; this once again proves that Germany does not have political sovereignty after almost 80 years since its defeat in the world war of the 20th century. Trout’s mistake, which leads corporations to economic death, has similarly led entire countries: Germany, Japan, Ukraine, etc. – to political death; now these are just cards to play in global politics.

As a counterbalance to the policy of economic ostracism of Russia, there unfolded a powerful “non-alignment movement” of Iran and China that have not joined Western sanctions and that have formed a triumvirate of allies: China – Russia – Iran, reinforced by India, Turkey and Saudi Arabia. The countries of the first group are the closest contenders for a geopolitical mopping up by the United States; this fact is what determines their position; the countries of the second group take advantage of the current unique situation to radically strengthen their international positions. The emerging configuration of geopolitical players creates an unstable equilibrium, which in itself indicates the end of the era of U.S. hegemony. Nevertheless, the latter is showing amazing persistence with regard to the elimination of Russia from the political arena; this needs a systematic explanation and will be considered in the next section.

Capital accumulation cycles, their significance and mechanism

The logic of the present-day geopolitical confrontation cannot be understood without Giovanni Arrighi’s concept of accumulation cycles. According to this concept, in spite of the popular ideas about a multipolar world, the world capitalist system exists within the framework of a monocentric model, when there is a certain world capital accumulation center (WCAC) in which the rules of international relations are formed and from where the world system is managed. Throughout the observed history of capitalism, Genoa, Venice, the Netherlands, the UK and the USA have consistently acted as a WCAC (Arrighi, 2006). So, the country that has gained the status of WCAC acts as a management subsystem of the entire world economic system, while the latter acts as a managed subsystem. The WCAC forms tools, rules and norms of relations between economic agents, states and ordinary

Figure 1. Stylized diagram of the history of the movement of world capital accumulation centers



Source: own elaboration.

people. In the absence of a WCAC or in the presence of many competing centers, the order in the world system decreases and manifestations of chaos and disorganization increase. Schematically, the process of shifting the WCAC in time and space is shown in *Figure 1*.

In the last 3–4 decades, the United States has acted as a global “legislator” of economic relations, served as a center of attraction of capital, skilled personnel and cultural achievements. At the same time, the U.S. power was manifested in the fact that almost any controversial situation anywhere in the world was resolved by the political leadership of the country in favor of its national interests. We agree with G. Arrighi, who pointed out that the U.S. “internalized”, i.e. took under its control, not only the defense and production functions of the state, but also the function of managing foreign markets (Arrighi, 2009a, p. 40). In other words, for the last 30–35 years, the United States has enjoyed a global political and economic monopoly.

However, over time, the next cycle of capital accumulation comes to its natural conclusion, and the political hegemony is to be transferred from the old WCAC to a new one, which “launches” a new cycle of accumulation. The period when the old WCAC is no longer coping with its “responsibilities” for managing the world system, and a new center has not yet fully taken shape and cannot yet take over the management of the world, is called the regime of geopolitical inversion or the regime of *global turbulence*. It is characterized by the instability of many processes and the unfinished nature of all social mechanisms of interaction between political actors in the global market, the intensification of competition between states, the emergence of numerous local military conflicts in a hot form. Currently, the world is going through this extremely unpleasant stage, when the U.S. hegemony is coming to an end, and no one can take its place yet. It is at this point that the key intrigue of world politics arises.

G. Arrighi himself pointed to the shift of the WCAC from the USA to Asia and mainly to China (Arrighi, 2009b, p. 40). However, an alternative WCAC represented by Russia was later considered, although doubts were expressed about the realization of its potentials (Balatsky, 2014). Currently, the situation is beginning to change dramatically and requires that all possible scenarios for the development of the global economic system should be given closer consideration; this uncertainty in the formation of a new WCAC is shown schematically in *Figure 1*. All the current actions of the United States confirm that their task is to prevent full-fledged development of three potential WCACs represented by a united Europe, Russia, and China.

Although the general disposition in the global political arena is clear, its details require clarification. To this end, Arrighi’s concept should be supplemented with several important provisions, which we will discuss below.

First, the main driver of economic growth and social evolution in a capitalist society is not just profit, but the phenomenon of superprofit. This point has been proven both theoretically and empirically. For example, it follows from the basic equation of economic growth that its maintenance requires a “special” economic sector, in which the annual return on capital is calculated in three- and four-digit figures (in percentage terms) (Balatsky, 2021). The assessment of the profit margin of different types of businesses in different historical periods confirms this conclusion (Balatsky, Ekimova, 2020). The main thing is that the WCAC has always been the main recipient of the superprofit phenomenon: astronomical profitability was typical of the economies of the Netherlands and Great Britain during their hegemony, and today it is the common thing in the business of the U.S. At the same time, the phenomenon of superprofit and the WCAC go hand in hand: the WCAC, through a global monopoly on the most attractive areas of activity, secures superprofit for itself, and the

latter, in turn, allows the country to remain a world leader. Violation of this mechanism generates global disruptions in the life of the GGPS.

Today, the privileged position of the United States is maintained by a multitude of “unnatural” facts: the right to issue the U.S. dollar as a world currency that is virtually not backed by any commodity; control of global drug trafficking by U.S. security and intelligence agencies¹; monopoly on high technology, etc. Only these circumstances can explain the well-known declaration of the United States that the life of an American is sacred: if there is a threat to the life of even one ordinary American citizen, even outside the country, the U.S. government sends an aircraft carrier to deal with the situation there. Although this slogan is largely a patriotic cliché, there has always been enough truth in it to think about the amount of revenue a state should have in order for it to be able to make such financial sacrifices. Thus it is clear that if there emerges a threat of destruction of the existing mechanism of the U.S. global monopoly, they will stop at nothing to prevent this. However, it is precisely such a threat that hangs over the United States today. This fact explains the intransigence with which the American establishment seeks the death of all its competitors.

Second, many facts suggest that a new WCAC can emerge on the territory of the Russian Federation. Russia’s area is 1.8 times larger than the United States. If we assume that there might be even an informal reintegration of Russia, Belarus, Ukraine and Kazakhstan, then the index of territorial superiority of this association will be 2.2 times compared to the United States (Balatsky, 2014). In the context of a globalizing GGPS, such an advantage should be recognized as Russia’s unique trump card, which no other country even

dreams of possessing. If we add to the above the absolutely unprecedented endowment of the Russian Federation with valuable natural resources and its position between Europe and Asia, the two key regions of world trade, then it is natural to assume that a new center of world economic activity – the WCAC – may appear on its territory. Given the military power and the ability to take in huge masses of capital and labor resources with the historical experience of their “melting down” into the Russian World, Russia is becoming the most dangerous enemy of the United States; this fact proves the absolute uncompromising attitude of the latter toward the special military operation; even China does not have such valuable characteristics for becoming a WCAC. For the United States, superprofit and world hegemony are at stake, and Russia acts as the main claimant to these civilizational benefits. At the same time, the situation does not depend on either Russia or the United States, it is a kind of whim of Nature and Providence, and therefore neither one nor the other country can avoid collision, which ultimately determines their uncompromising confrontation.

Third, a new WCAC should implement a new management function, which, apparently, the United States can no longer do. For example, Arrighi believed that this new property should be the ability of the WCAC to reproduce (Arrighi, 2009a, p. 39). The arrival of Donald Trump as the U.S. President actually meant an attempt to “restart” the cycle of capital accumulation within the jurisdiction of the old WCAC and thereby preserve its hegemony. However, this scenario failed; therefore, the center will continue to shift to another region. We can say that the United States can no longer rule the world in the old way, and they do not want to do it in a new way.

Important explanations should be made in this section. The fact is that the *cycle of capital accumulation* should also be interpreted as a *management cycle*. At the time when a new WCAC

¹ There are many works on this topic. To get a general impression, read a short report by Laila Tajeldine. Available at: <https://inosmi.ru/20151218/234850836.html>

emerges, it carries out adequate management of global processes, but over time the world economic system becomes more complicated – the number of its elements (population, companies, technology, etc.) and connections increases. In accordance with W.R. Ashby's Law, which is sometimes called the law of requisite variety, the control subsystem (WCAC) must be no less complex than the managed subsystem (world economic system) (Ashby, 2021); otherwise, the system is destroyed. At the first stage of the accumulation cycle, the WCAC is quite progressive and is able to effectively endure the growing complexity, but sooner or later the complexity of the GGPS becomes excessive and the center no longer has time to adjust itself adequately. It is at the second stage of the accumulation cycle that the problems of managing the world economic system start to emerge. If the WCAC does not keep up with the world's changes, therefore, Ashby's Law is violated, then E.A. Sedov's Law comes into play; it is also called the law of hierarchical compensation: the growing complexity of the managed subsystem is compensated by the controlling subsystem by imposing restrictions on it (Balatsky, 2013). This statement corresponds to the concept of complexity by Danilo Zolo (Zolo, 2010), according to which politics is the search for a balance between the *security* of the system and the *freedom* of its participants; permanent global shocks of complexity (demographic pressure, growing inequality between countries, mass migration, widespread proliferation of all types of weapons, terrorism, environmental disasters, etc.) lead to the dominance of repressive (restrictive), but quite effective (!) political regimes (Zolo, 2010). This point is confirmed by observations of the world during the period of global turbulence.

The limitless source of the growth of social complexity is found in a fundamental global regularity noticed by Douglas North: the world develops by shifting risks from the physical world to the social world. Thus, knowledge and new

technology lead to a decrease in the uncertainty about the surrounding physical environment, but at the same time become a source of social uncertainty (North, 2010, p. 38). The permanent complication of society leads to the desire of the authorities to simplify it, which justifies the formation of authoritarian political regimes.

The above helps to understand how a management deficit is formed in the world economic system in the second half of the capital accumulation cycle. It is in this phase that the WCAC shifts from a constructive policy of managing the world to a destructive one that hampers the development of all its competitors in order to preserve its own privileged position in the GGPS. The mechanism for maintaining neocolonialism becomes an instrument of such a policy. At this stage, the restrained countries express a growing protest against the established world order. It was this protest that urged Russia to launch the special military operation, and Iran and China to move toward an alliance with it. And it is this protest that leads to the deglobalization of the world system and stagnation of U.S. hegemony.

At this point in the analysis, a natural question arises: what prevents the U.S. authorities from rebuilding their system of world governance. Why don't they move on to more progressive political solutions?

Steven Lukes gave exhaustive answers to these questions in his concept of the indivisibility of power (Lukes, 2010). Since power is supported by an appropriate power structure, it cannot be redistributed; it can only be destroyed and rebuilt anew (Lukes, 2010, p. 105). Power is not like a big pie, from which you can cut off a piece of the right size and share it with a competitor. It is all or nothing. That is why the U.S. global power, supported by the appropriate power structure, cannot be slightly adjusted so as to resolve global conflicts with competitors such as China and Russia. Any concession of power by the United States will

require the complete dismantling of the existing architecture of global power networks; and this move can result in a complete loss of the country's position (Balatsky, 2019). Thus, the demand for the preservation of power and the *phenomenon of the indivisibility of power* automatically lead to the loss of its effectiveness and the relocation of the center of capital to another geographical niche. It is this process that leads to the confrontation of various centers of power with its inherent world wars of various types.

Let us provide a brief summary of the above: the objectivity of the capital accumulation cycle and the change of the WCAC against the background of extremely high stakes in the game – world power and superprofits – make the struggle of competing states absolutely uncompromising, which is why the U.S. has a bulldog determination concerning Russia which is well placed to become a new leader. In other words, the United States cannot help but fight with Russia, just as Russia cannot help but fight with the United States. Taking into account other circumstances, this war develops into a West/Non-West civilizational confrontation.

Features of the current period of global geopolitical turbulence

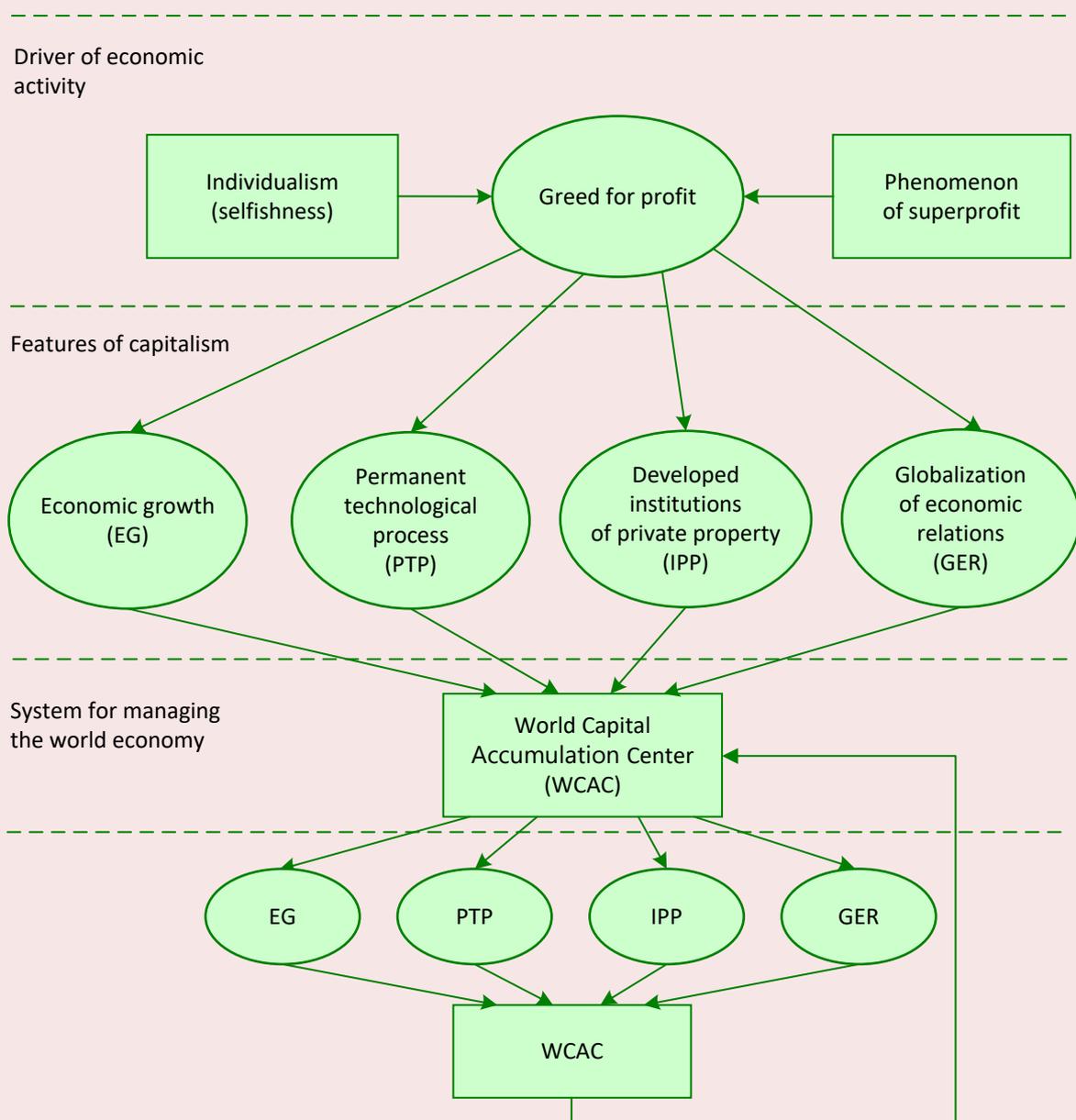
The described logic of changing accumulation cycles has a general character, but currently requires serious clarification due to the scale of the ongoing geopolitical shifts. Let us look at these aspects in more detail.

To begin with, let us recall the historical chronology of Arrighi's cycles of accumulation: the First Cycle, 1560–1740, Venetian-Genoese (lasted 180 years); the Second Cycle, 1740–1870, Dutch (130 years); the Third Cycle, 1870–1970, British (100 years); the Fourth Cycle, 1970–present day, American (≈80–85 years) (Arrighi, 2006, pp. 42–49). This pattern allowed Arrighi to assert that the duration of the accumulation cycle is decreasing over time, and the era of the decline of U.S. power has already begun and now the country is in the

stage of terminal crisis. According to Arrighi's chronology, the Fourth Cycle of Accumulation should end around 2055, which is a little more than 20 years away, during which a new WCAC should emerge. However, so far this center has not been determined, and therefore a violation of the established rhythm of cycle change is possible. This is due to the following features of the current global geopolitical turbulence.

The first feature of the Fifth Cycle of Accumulation is that it is formed in the phase of the extinction of capitalist effects, including the extinction of economic growth. For a better understanding of this limitation, we can refer to *Figure 2* that shows the origins of world capitalism and its fundamental features, without which its continued existence can hardly be imagined. One of these signs is the phenomenon of economic growth, but for more than a decade there have been discussions about its coming to an end due to reaching its physical limit. Thus, Richard Heinberg proves that three insurmountable obstacles stand in the way of further economic growth: depletion of key natural resources (oil, metals, water, heavy elements, etc.); deterioration of the environmental situation (pollution of the oceans, air pollution in cities, climate change, etc.); over-accumulation of state and non-state debt (the inability to service accumulated debts without triggering a global economic catastrophe) (Heinberg, 2011). World statistics indicate if not a complete halt in growth then at least a slowdown in its pace in almost all countries. This means that a future fifth WCAC will not be able to emerge in the GGPS on the wave of universal growth; this is why its crystallization stage will be slowed down. Most likely, the disruption of a global growth regime will prolong the Fourth Cycle of Accumulation and postpone the arrival of a new leader state. It is evidenced by the fact that possible contenders for a new WCAC – the United States, China, Russia and, perhaps, Iran – are making no headway in this regard.

Figure 2. Features of capitalism and the cycles of capital accumulation



Source: own elaboration.

The second feature is closely related to the first and consists in slowing down technological progress. Labor productivity growth rates, as well as economic growth rates, have been declining in all countries in recent decades, and there is no guarantee that this trend will be replaced by a new technological

explosion. According to Klaus Schwab, the growth rate of labor productivity in the United States over the past 70 years has more than halved (Schwab, 2018, p. 46). At the same time, only 0.5% of the U.S. workforce is employed in industries that did not exist at the beginning of the 20th century; less than

8% of new jobs were created in the 1980s and only 4.5% of new jobs were created in the 1990s (Schwab, 2018, p. 51). Thus, current technological progress leads to a slow increase in labor productivity and is hardly promoting the supply of new labor. This slows down the effect of industrial expansion, which a new WCAC should rely on.

The third feature is the final destruction in 2022 of the “sacred” property right on which the capitalist system was based. The arrest of the gold and foreign exchange reserves of a sovereign state, Russia, by the West, the arrest of foreign accounts and real estate of many citizens and companies of Russia and Belarus (oligarchs, officials, etc.), provision of legal protection to persons illegally occupying private housing in the absence of their owners, forced withdrawal of their citizens’ businesses from Russia, non-interference of the police in the outrages of looters during the 2020 pre-election period of the U.S. presidential race, etc. – all this proves the collapse of the institution of private property. In such conditions, the launch of the Fifth Cycle of Capital Accumulation may require a fundamental restructuring of the world capitalist system, even if it is preserved. This feature imposes institutional restrictions on the Fifth WCAC that are not yet fully understood.

The fourth feature of the Fifth Cycle of Accumulation is associated with the effect of globalization. On the one hand, the completeness of this process predetermined the gigantic scale of all geopolitical castling, on the other – the SMO in Ukraine finally consolidated the trend toward deglobalization. This, again, will greatly hinder a new WCAC from spreading its economic influence and increasing its relative power.

All these features do not just interfere with the normal change of the WCAC, but also urge us to think under what kind of economic and political system this change will take place. Given that the most probable contender for the Fifth WCAC, China, is currently a state ruled by the Communist

Party, and another potential contender, Russia, has experience (albeit negative) in building a communist regime, we can say that replacing the traditional capitalist system during the geopolitical inversion remains an open question.

In this regard another question arises, which concerns a new model of world governance. Speaking about it back in 1947, A. Toynbee shrewdly remarked: “Salvation perhaps lies, as so often, in finding a middle way. In politics, this golden mean would be something that was neither the unrestricted sovereignty of parochial states nor the unrelieved despotism of a centralized world government; in economics it would be something that was neither unrestricted private enterprise nor unmitigated socialism” (Toynbee, 2011, p. 35). But if the despotism of the U.S. ruling the world in the previous 30 years is weakened by a new WCAC, then can we assume that a concentric model of capital accumulation will be preserved? Or will the hotly-disputed multipolarity prevail in one form or another?

These questions remain open for now.

We cannot but emphasize that the emerging shift of the current WCAC obviously implies a slowdown in the formation of a new accumulation cycle. So, if earlier all the castling moves concerning a WCAC took place inside the West and Western civilization, then a new center will definitely be outside the West – be it Russia or China, it does not matter. This complicates and prolongs the period of geopolitical turbulence. The situation is also aggravated by the ongoing castling of the countries of the Center and Periphery. Thus, the countries of Europe, which traditionally formed the core of the world economy and the center of our Civilization, are slowly but surely turning into its periphery, while the countries of Asia are moving in quite the opposite direction (Volkonskii, 2021).

What has been said above introduces a significant element of uncertainty into the process of ongoing geopolitical inversion.

Russia as a center for assembling a new system of world order

By 2022, Russia has unwittingly found itself in the midst of geopolitical shifts. It has the economic and geopolitical parameters that make it a potential new WCAC. Its possibilities for developing its own territory are almost limitless, which allows it to “launch” the scale effect and thereby achieve high effectiveness of any megaprojects. It also has a huge potential for accepting immigrants, which has always been its typical feature.

The brewing global resource crisis has led to a rearrangement of basic economic values: the primacy of natural resources and the secondary nature of technology have become obvious. And it is natural resources that Russia possesses in abundance, compared to any other country. Arrighi also noticed the alternation of extensive and intensive types of development of the world system during the formation of capital accumulation cycles. Thus, under the Genoese and the British capital accumulation regimes, the expansion of the world economy took place, and under the Dutch and American regimes – its geographical consolidation (Arrighi, 2006, p. 41). Consequently, the next cycle should again become extensive, and only Russia is capable of doing this today – neither China, nor the U.S. or Brazil have such potential.

Moreover, Jared Diamond justified the priority of Eurasia in the birth of modern human civilization by its successful geometric shape compared to other continents: it stretches from east to west, rather than from south to north like America and Africa (Diamond, 2010). In his opinion, this was the reason for the spread of all its product innovations horizontally, that is, much faster and easier than vertically in other regions where it was necessary to overcome natural differences in climate. Paradoxically, today Russia still has this advantage compared to America and even China; but today Russia's advantage is additionally backed by such

factors as climate warming, the availability of modern technology, etc.

It is worth noting that the “horizontal effect” provides Russia with vast opportunities to disseminate technological innovations in the context of over-accumulation of world capital and its readiness to take part in the development of profitable economic areas (in Figure 1, this advantage of Russia is emphasized by its elliptical shape, in contrast to circular shapes of other countries). This gives Russia enormous objective advantages in the geopolitical game. However, the country has been dealing with subjective negative circumstances for 31 years: lack of political sovereignty and a capable power elite, gradual extinction of the labor and creative activity of the masses, brain drain, etc. However, the rise of Russia will mean the inevitable decline of the United States, which the American establishment cannot allow. That is why the United States is playing its geopolitical game by waging a Fourth (hybrid) World War against Russia.

Let us return once again to the point that the main contradiction in Russia's development in the previous period, which was growing under Boris Yeltsin, Dmitry Medvedev, and Vladimir Putin, has finally matured by 2022: Russian citizens' life was improving, while the country was falling into an abyss. In other words, the one-sided economic development at the expense of the commodities sector alone, which makes it possible to “spread” the income from natural rent among the population, has become obvious and unbearable. This contradiction played its part in the split of society at the time when the SMO was launched: a significant part of Russians wanted their life to remain the same, while others did not want it. The SMO itself, which not only exposed Russia's economic problems, but also consolidated other countries in a hybrid war against the United States, has become a *key event in history* and the starting point of the global geopolitical confrontation between the West and the Non-West.

Conclusion

In the paper, we have made an elementary reconstruction of the post-war events that reveal the logic of the current geopolitical turbulence. The analysis helps to understand why modern Russia is in an extremely contradictory situation: while possessing an enormous economic potential, even after 31 years since the collapse of the USSR, it still lacks crucial economic sectors. At the same time, it is characterized by a unique geopolitical position, which makes it a most likely contender for the role of a WCAC in the Fifth Cycle of Accumulation. These two facts produce a powerful contradiction both within the Russian Federation and abroad in the eyes of political competitors; this leads to social tension in the global economic system. The severity of the above contradictions led to the fact that it was Russia that acted as the primary detonator of geopolitical shifts.

Related scientific concepts were used to reconstruct the events preceding the 2022 SMO: economic (Trout's mistake, neocolonialism); cybernetic

(Ashby's Law and Sedov's Law); managerial (external management, hybrid warfare); synergetic (synergetic effect, system complexity, order, chaos); political science (security and freedom, power structure); political economy (capital accumulation cycle, global capital center, rate of return); institutional (shifting risks from the physical world to the social world); geographical (horizontal diffusion of innovations); psychological (war of meanings, war of nerves). This made it possible to bring together many poorly compatible phenomena and reveal the logic of the geopolitical competition that has taken place over the past 50–60 years.

We find the result of the analysis in the conclusion according to which Russia, being in the epicenter of geopolitical turbulence, cannot avoid a direct collision with the Collective West. From now on, over the next 15–20 years, the country will have to go through all the hardships of the Fourth (hybrid) World War. The question regarding the possible outcome of this war is beyond the scope of the present paper.

References

- Arnaud D. (2009). *Navukhodonosor II, tsar' Vavilonskii* [Nabuchodonosor II, roi de Babylone]. Moscow: Molodaya gvardiya.
- Arrighi G. (2006). *Dolgi dvadtsatyi vek: Den'gi, vlast' i istoki nashogo vremeni* [The Long Twentieth Century: Money, Power, and the Origins of Our Times]. Moscow: Territoriya budushchego.
- Arrighi G. (2009a). Afterword to the second edition of "The Long Twentieth Century". *Prognosis*, 1(17), 34–50 (in Russian).
- Arrighi G. (2009b). *Adam Smit v Pekine: Chto poluchil v nasledstvo XXI vek* [Adam Smith in Beijing: Lineages of the Twenty First Century]. Moscow: Institut obshchestvennogo proektirovaniya.
- Ashby W.R. (2021). *Vvedenie v kibernetiku* [An Introduction to Cybernetics]. Moscow: Lenand.
- Balatsky E.V. (2011). Z. Bauman's concept of liquid modernity and its applications. *Obshchestvennye nauki i sovremenost'*=*Social Sciences and Contemporary World*, 3, 134–146 (in Russian).
- Balatsky E.V. (2013). Concept of complexity and economic theory of democracy. *Obshchestvo i ekonomika*, 5, 5–24 (in Russian).
- Balatsky E.V. (2014). Prerequisites for global geopolitical inversion. *Economic and Social Changes: Facts, Trends, Forecast*, 2(32), 28–42.
- Balatsky E.V. (2019). Measurement of Power by Steven Lukes. *Mir Rossii*=*The Universe of Russia*, 28(2), 172–187 (in Russian).
- Balatsky E.V. (2021). Return on equity as an economic growth driver. *Economic and Social Changes: Facts, Trends, Forecast*, 14(1), 26–40.

- Balatsky E.V., Ekimova N.A. (2020). Driving the economy: The role of a special economic sector. *Journal of New Economy*. T. 21. № 3. S. 5–27.
- Devyatov A.P. (2020a). *Nebopolitika. Dlya tekh, kto prinimaet resheniya* [High Politics. For Those Who Make Decisions]. Moscow: IP Sokolova A.A.
- Devyatov A.P. (2020b). *Razvedka budushchego kak iskusstvo obrazov i podobii* [Exploration of the Future as the Art of Images and Likenesses]. Moscow: IP Sokolova A.A.
- Diamond J. (2010). *Ruzh'ya, mikroby i stal'. Istoriya chelovecheskikh soobshchestv* [Guns, Germs, and Steel: the Fates of Human Societies]. Moscow: AST.
- Gusev A.B., Yurevich M.A., Ekimova N.A., Advokatova A.S. (2022). Post-Soviet space thirty years on: Independence vs synergy. *Terra Economicus*, 20(2), 21–39 (in Russian).
- Heinberg R. (2011). *The End of Growth: Adapting to Our New Economic Reality*. Gabriola Island, B.C.: New Society Publishers.
- Huntington S. (2021). *Stolknovenie tsivilizatsii* [The Clash of Civilizations]. Moscow: AST.
- Ilyin V.A., Morev M.V. (2022). The Rubicon has been crossed: February 24, 2022, Russia entered a new stage in its development in the 21st century. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz=Economic and Social Changes: Facts, Trends, Forecast*, 15(2), 9–30. DOI: 10.15838/esc.2022.2.80.1 (in Russian).
- Komleva N.A. (2017). Hybrid war: Essence and specific features. *Izvestiya Ural'skogo federal'nogo universiteta. Seriya 3: Obshchestvennye nauki=Bulletin of Ural federal university. Ser. 3, Humanities*, 3(167), 128–137 (in Russian).
- Lukes S. (2010). *Vlast': Radikal'nyi vzglyad* [Power: A Radical View]. Moscow: Izd. dom GU-VShE.
- North D. (2010). *Ponimanie protsessa ekonomicheskikh izmenenii* [Understanding the Process of Economic Change]. Moscow: Izd. dom GU-VShE.
- Schwab K. (2018). *Chetvertaya promyshlennaya revolyutsiya* [The Fourth Industrial Revolution]. Moscow: E.
- Shebarshin L.V. (2017). *Ruka Moskvy. Zapiski nachal'nika vneshnei razvedki* [The Hand of Moscow. Notes of the Chief of Foreign Intelligence]. Moscow: Algoritm.
- Toynbee A.J. (2011). *Tsivilizatsiya pered sudom istorii. Mir i Zapad*. [Civilization on Trial]. Moscow: AST: Astrel'.
- Trout J. (2009). *Bol'shie brendy – bol'shie problemy* [Big brands, Big Trouble: Lessons Learned the Hard Way]. Saint Petersburg: Piter.
- Volkonskii V.A. (2021). *Smyslovye ustanovki i rol' gosudarstva v epokhu mnogopolyarnogo mira* [Semantic Attitudes and the Role of the State in the Era of a Multipolar World]. Moscow: Knizhnyi mir.
- Zolo D. (2010). *Demokratiya i slozhnost': realistskii podkhod* [Democracy and Complexity: A Realist Approach]. Moscow: Izd. dom GU-VShE.

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