Nuclear Conflicts of the Twenty-First Century

A.A. Kokoshin

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EDITOR'S NOTE

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Concerning the Svechin Seminar

The Svechin Seminar was formed within the framework of the Institute of International Security of the Russian Academy of Sciences in memory of the outstanding Russian and Soviet scholar, military theoretician and historian, and true patriot of our country, Aleksandr Andreevich Svechin.

The author first became acquainted with A. A. Svechin's legacy in the early 1970s on reading his book *Istoriya voennogo iskusstva* [*A History of the Art of War*]. This book was striking due to its unconventional opinions, the author's enormous erudition, and especially because much of what Svechin wrote at the beginning of the 1920s was later, in the atmosphere of Stalinism, completely removed from scientific and practical circulation in our country's military thinking, to disappear from historical and political science as a whole.

Svechin always considered questions of military strategy and of the art of war as a whole, in a broad and deep political context, unlike many other high-level authors who work on military strategy problems. He paid great attention to the state of the system of international relations and to the changes that occur in the balance of power between the leading centers of power and in their interaction with each other.

An integral part of Svechin's work on questions of military strategy involve questions of strategic control—the mechanisms and procedures of preparation and decision making and their implementation. This author was distinguished by extreme civic and scientific integrity and by the sobriety of his opinions.

Even in the middle and late 1920s, Svechin made amazingly far-sighted predictions regarding the Second World War, including the part of it that affected our country. Such predictions deserve to be studied even more thoroughly, as they are based in the distinctive methodology that is Svechin's valuable legacy.

The author was acquainted with the details of Svechin's legacy and fate (when Svechin himself was still rarely remembered) by General-Colonel Nikolai Andreevich Lomov [who at that time was in charge of the Chief Operative Directorate of the General Staff of the Armed Forces of the USSR, and later for many years headed the Department of Strategy at the Military Academy of the General Staff (VAGSh) of the Armed Forces of the USSR], by General-Lieutenant Mikhail Abramovich Mil'shtein, Deputy Commander of the Main Intelligence Directorate of RKKA during the Great Patriotic War (later, for many years, department head at VAGSh), and by VAGSh Professor General–Major Valentin Veniaminovich Larionov (at that time the senior author of the major work *Voennaya strategiya* [*Military Strategy*] under the editorship of Marshal of the Soviet Union V. D. Sokolovskii).

An important role in the author's understanding of Svechin's role and his legacy was played by Colonel V. S. Kulish, professor at the M. V. Frunze Military Academy, and by General-Major M. M. Kasenkov, professor in the Department of Strategy of VAGSh, and later by General-Major G. V. Batenin, who took charge of the administration of the first deputy defense minister in 1992, when the author held that post.

Svechin did his creative work in the prenuclear age. His writings contain no foresight of the appearance of nuclear weapons (as do those of science-fiction writer H. G. Wells), which radically changed what he called the "strategic landscape." But Svechin's understanding of the motive powers of countries, peoples, leaders of states, and general staffs in questions of war and peace, of long-term trends, and of the laws governing the evolution of military affairs, remains very valuable even in our time.

Specialists not only in our country, but in such countries as the USA, Germany, Great Britain, etc., quite deservedly call Svechin the "twentieth-century Clausewitz."[1] Svechin's logic

and the results of many of his historical and military-theoretical studies remain significant even in the twenty-first century.

The nucleus of the Svechin Seminar, based at the Institute of International Security of the Russian Academy of Sciences, is formed by two groups of the author's students of different generations: the first from among the author's graduate students and candidates of the 1980s, who obtained considerable practical experience in the 1990s, and a new generation, who are completing their studies in institutions of higher learning or who, having completed them, have become graduate students and candidates in the last year or two.

The main avenues of activity of the Svechin Seminar include the study of problems of structural changes in the system of international relations:

- the balance of power between the leading "centers of force" (the chief subjects) of international relations and the evaluation of the character of the interaction between them in the sphere of security, including security in the military-political sphere;
- acute international conflicts and questions of the prevention of conflicts, especially those that involve the use of weapons of mass destruction, including nuclear weapons;
- questions of strategic control; mechanisms, procedures, and people, and how the control structures of various states interact with each other in conflict and crisis situations.

I. INTRODUCTION

The author proceeds from the definition, that nuclear conflict is a situation involving one or more possessors of nuclear weapons, and in the course of which escalation reaches a level at which the practical possibility of using nuclear weapons begins to be considered. The higher phase of nuclear conflict means the use of nuclear weapons at various scales—from single nuclear explosions to the mass use of nuclear weapons.

Due to the special nature of this weapon, questions of the use of nuclear weapons and questions of "nuclear strategy" and "nuclear politics" essentially differ from questions of military strategy with the use of conventional, non-nuclear means of armed combat. In particular the relation between offense and defense, otherwise a cornerstone of military strategy (as well as of operational art and tactics), appears fundamentally different.

Systematic observations of the course of events in this sphere over the last several years have given the author cause to suppose that the probability of nuclear conflicts is again starting to increase.

The events that lead to an increase of "nuclear antagonism," undoubtedly include the "megaterror" acts of September 11, 2001 in the USA.

Rather than attempting to completely cover this extensive topic in its entirety, the author considers in this work the probability of nuclear conflicts in the coming 20–25 years under a group of conditions that a number of scholars and specialists have with good reason called the "second nuclear age."[2] This new historical stage is especially characterized by the growth in the role of the "Asian players" on the "nuclear field"—India, Pakistan and, of course, the People's Republic of China. The likelihood that new members of the "nuclear club" will appear, especially among the Asian states, is increasing.[3]

The author has deemed it necessary to consider potential nuclear conflicts especially among four groups of the subjects of international relations: (I) the "old nuclear powers," primarily the USA and Russia, as well as the Russia–USA–China "triangle;" (II) the interaction between the new members of the "nuclear club"—India and Pakistan; (III) a potential "multivertex" nuclear configuration, which can result from the proliferation of nuclear weapons and the extremely probable appearance of new nuclear states; (IV) the interaction between governmental and non-governmental "dramatis personae" (actors) in the person of radical political organizations using terrorist methods.[a]

In a number of cases, one is already speaking of the probability of such conflicts in the near future; in other cases, they can relate to the more distant future—beyond the first and then the second decade of the new century.

The probability of nuclear conflicts is associated both with general questions of the status of the system of international relations in its separate components and with specific questions associated with the motives and conditions of the acquisition by one country or other of its own nuclear weapons and with its place and role in the system for ensuring the country's national security, in its highest (major) strategy, in military strategy, and in specific operational–strategic planning.[4]

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[a] The author reasons from the presumption that in all these cases it is not single consolidated actors with logically-deduced positions common to each of them, but complex configurations of the machinery of state and specific political figures acting from various motives, often very far from commonly accepted concepts of rational behavior in conflict and crisis situations in accordance with national interests (in their generalized form) of specific countries and with commonly accepted (at least to the "North" in relations between the "East" and the "West") norms of nuclear deterrence. As applied to the interaction of countries in a nuclear conflict, three main models are applicable in definite combinations. These were mainly developed in the classical work of Professor G. T. Allison for the Cuban Missile Crisis of the autumn of 1962: the "rational actor" model, the "organizational behavior" model, and the "governmental politics" model. See Allison, G. T. and P. Zelikow. *The Essence of Decision, Explaining the Cuban Missile Crisis*. Second Edition. New York: Longman, 1999.) However, the author does not use these models in direct operational form in this book, but keeps them in mind as a definite analytical context.

This work is mainly aimed at the new generation of politicians, scholars, and specialists, the military command, and the defense industry who, in the performance of their duty, have to deal with problems of the development of nuclear weapons and their use for purposes of defense. However, it is also intended for a wider circle of the Russian "political class."

According to the constitution of the Russian Federation, the question of the use of nuclear weapons falls under the jurisdiction of the President—the Commander-in-Chief of the Armed Forces. However, no president acts in a vacuum. Besides the officials who handle questions of war and peace, this includes the appropriate ministers, the chief of the General Staff and a number of his deputies, as well as aides and advisers. Many of them have no formal relation to political–military problems, especially nuclear problems, but, as historical experience teaches, may influence affairs in a crisis situation no less than those, whose office requires them to make the highest-level decisions and to ensure their implementation.

The highest state leadership is strongly affected by the mass media, especially television. This means that journalists and communicators, especially those who cover military and political problems, have a special role to play. Their professionalism is no less important than that of politicians and the highest officials.

In questions of ensuring strategic stability in its nuclear dimension, there must be no oversimplification and the numerous nuances should not be overlooked, since here, as nowhere else, "the devil is in the details."

II. Potential nuclear conflicts between the "old nuclear powers"

1. Origins and prospects of Russo–American relations in the strategic nuclear sphere

The interaction of Russia and the USA (or of the USSR and the USA) in the nuclear sphere has a long history. It is full of the most important lessons, which have already become half-forgotten by a significant part of the political élites of both countries.

Before a system was formed that ensured a comparatively high level of strategic stability (which system is largely still in operation), both countries passed through a series of harrowing crises that brought them to the brink of catastrophe. (The Cuban Missile Crisis of October 1962 especially stands out in this regard, when both countries were closer than ever to crossing the boundary into a third world war, with the use of all the nuclear forces and resources available to them.[5]) Evaluating the lessons of this crisis today, we should point out that it by no means arose deliberately. Neither the Soviet leaders nor the leaders of the USA were consciously prepared to aggravate the situation and especially to start a limited war, not to mention total war. The general staffs of the two countries were also not prepared for this.[6]

Only after these crises, as a result of many years of the most serious negotiations, basic agreements between the USSR and the USA that codified a significant part of their relations in the strategic nuclear sphere were signed at the beginning of the 1970s, and cementing the position of the "nuclear stalemate" by virtue of a *de facto* situation of "mutual assured destruction."

It is hard to overestimate the significance of the 1972 Anti-Ballistic Missile Treaty (the ABM Treaty), initiated in 1967 by US Secretary of Defense Robert McNamara during the meeting of the Chairman of the Council of Ministers of the USSR, A. N. Kosygin, with US President Lyndon Johnson. The idea of limiting anti-ballistic missile defense systems was at first decisively rejected outright by A. N. Kosygin, who immediately made an abrupt public statement. His arguments, in essence, strikingly recall those in favor of ABM defense used by Ronald Reagan and his administration in the 1980s when proposing the Strategic Defense

Initiative (SDI) program and those used by George W. Bush's administration in the new millennium.

In his press conference at the meeting, Kosygin said: "...what weapons should be regarded as a stress factor—offensive or defensive? I think that defensive systems that avert attack are not a cause of the arms race, but a factor that prevents the killing of people. Some people think thus: Which is cheaper—to have offensive weapons that can annihilate cities and entire states, or to have defensive weapons that can prevent this annihilation? There is currently a theory in circulation here and there that the cheaper system should be developed. "Theoreticians" of this kind argue about how much it costs to kill people—500,000 dollars or 100,000 dollars. An anti-ballistic missile system may cost more than an offensive system, but it is intended not for killing people but for preserving human lives... To solve the problem of security there are other paths, much more reliable paths, which actually could accommodate humanity. You know that we advocate a total cessation of the nuclear arms build-up and the elimination of stockpiles of nuclear weapons..."[7]

Kosygin at that time was not, ultimately, prepared to seriously consider the problems of strategic stability, as was true of those who were responsible for preparing him for this meeting. The overall thinking of the state and party leadership of the USSR, as well as of the higher military command of the armed forces of the Soviet Union, was then quite different from that of Robert McNamara with his *wunderkinder* (drawn mainly from the Rand Corporation).

After several years the position of the Soviet leadership radically changed, as a result of which Leonid Brezhnev and Richard Nixon signed the ABM Treaty in Moscow in 1972.

However, it was only in the mid-1980s that statements concerning the possibility of "victory" in a war with massive use of nuclear weapons disappeared from the lexicon of governmental and military figures in both countries, in the spirit of the Soviet theoretical work

Voennaya strategiya [*Military Strategy*] of the 1960s under the editorship of Marshal of the Soviet Union V. D. Sokolovskii and similar publications of American military and civilian strategists.[a]

After the period of détente in the 1970s, a strong recurrence of the Cold War, including in its nuclear dimension, took place at the end of the 1970s and the first half of the 1980s. It was largely associated with the entry of Soviet forces into Afghanistan in December of 1979. [The author can testify that the probability of a sudden massive nuclear strike (or strikes) on the part of the USA[b]— "disarming," "decapitating," etc. strikes—was seriously considered in the USSR at the beginning of the 1980s. Similar views were at that time in circulation in the USA.[a]]

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[a] As recalled by the main developer of this work, General–Major V. V. Larionov, Sokolovskii, having been commissioned to prepare such a collective work, decided to obtain direct orders from the head of the government and of the Communist Party, Commander-in-Chief N. S. Khrushchev. At the time, Sokolovskii was no longer in office; he had resigned the post of chief of the General Staff of the Armed Forces of the USSR because he was dissatisfied with Khrushchev's policy of reducing the number of the Armed Forces of the USSR as the role of missiles and nuclear weapons increased. Sokolovskii did not obtain an audience with Khrushchev right away. The members of the group of authors for the preparation of *Military Strategy* waited for him impatiently. Sokolovskii emerged from his session with Khrushchev in a somewhat flabbergasted state. Khrushchev's main directions in Sokolovskii's account were very distinct and clear: "Write the book so that when they in the West read it they'll be scared half to death" (Khrushchev, in his characteristic style, actually used a much coarser expression). The directions (given before the Cuban Missile Crisis of October 1962) were successfully carried out. Many years later, this book (having gone through many editions in translation in the West) was used by "hawks" in the USA and other countries as a basis for their own analogous military strategy and for massive military build-ups, especially for those that assumed that it is possible to wage nuclear war and achieve victory in a nuclear war.

[b] In common parlance, the concepts of "first strike" (having in mind the infliction of the **first** strike of the attacking side) and "retaliatory strike" (or second strike) are most often used. This is incorrect. The first strike can be from the side that starts the war or from the side that is carrying out a retaliatory action. Naturally, on the side that is being attacked, it will not be the first strike in the war as a whole, but for the planners of military actions it will be the first retaliatory strike. Thus in principle there can also be a first retaliatory strike and a second retaliatory strike.

In studying this question and synthesizing various views on this problem, the author arrived at the following classification of the use of nuclear weapons: a sudden strike at a definite early time, inflicted before the opponent is prepared to use his own forces; a pre-emptive strike (against an opponent prepared to use nuclear forces), a counterstrike (with the launch of ICBMs or submarine-launched ballistic missiles or cruise missiles when the launch of the opponent's means of attack has already been recorded, but they have not yet reached the territory of the country being attacked); a retaliatory counterstrike (a comparatively massive launch of strategic weapons after the first nuclear explosion of munitions delivered by the opponent on one's own territory), and a retaliatory strike (after a comparatively significant number of explosions on the territory of the country being attacked). One subvariant of a retaliatory strike (which can be called a "deep retaliatory strike") is an action in

The most serious challenge to the stability of the military–strategic equilibrium under the conditions of strong recurrence of the Cold War at the beginning of the 1980s was Reagan's "strategic defense initiative" (SDI). In the final analysis, this program of scientific research and experimental development (R & D) envisaged the creation of a large-scale system of anti-ballistic missile defense that would include a space-based echelon (or echelons) and the massive use of various "exotic" weapons, including various forms of directed-energy weapons.

If such a system appeared in the USA, the military-strategic equilibrium would become highly unstable. Such a system would become still more unstable, as seems paradoxical at first glance, if large-scale ABM systems were created in both countries,[b] since theoretically the stimuli to launch a pre-emptive disarming strike would be strengthened in both countries.

Based on theoretical computations and specific scientific and technical operational–strategic and operational–tactical calculations (which, it should be noted, many in this country's

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accordance with the concept of "dead hand," when the infliction of a retaliatory strike is programmed in such a way that the command for it is issued even if the state leaders and the military commanders have been completely destroyed by the opponent in a "beheading strike."

Even after the "old nuclear powers" have spent decades working out the corresponding plans, procedures, and technologies, each of these versions is fraught with a high degree of indeterminacy for the persons making the political decision, with great problems in practical implementation, and with the strongest "friction of war" (as Clausewitz called it).

[a] This is greatly promoted by the fact that, despite the external dominance of McNamara's ideas of ensuring "mutual assured destruction," both sides have in fact very actively developed methods of destroying the strategic nuclear forces of the other side, "the capability to wage nuclear war," having in mind above all the possibility of destroying the strategic nuclear forces of the other side—of "disarming" it. Today it is possible to say with confidence that, if the (military) representatives of the USSR surpass those of the USA in rhetoric regarding the possibility of "victory" in a large-scale nuclear war, the USA was as a rule the pioneer in developing various destabilizing weapons for pre-emptive strikes.

[b] At that time, the USSR had one comparatively small ABM defense system deployed around Moscow, which was allowed by the ABM Treaty of 1972 (and by the 1974 protocol to it). Other versions of ABM defense systems were being worked on at the same time. In the mid-1970s, the USA even froze the creation of a similar missile defense system, initially intended to cover one positional region of Minuteman ICBMs. Such a difference of objects and tasks for ABMs reflected the difference in the political systems of the two countries: In the USA, the governmental leaders could not allow themselves to create an ABM defense system that even gave the appearance of protecting the capital (i.e., themselves and those close to them) without protection for the population of the country as a whole.

leadership and upper military command found it very hard to assimilate), the concept of "asymmetric response" of the USSR to the SDI program was developed, in which the author had occasion to take the most active part.[8] The concept of "asymmetric response," worked out in detail in a number of open scientific publications, classified documents, and scientific research reports, was officially adopted by the Soviet leadership. However, in fact, various "symmetric measures," including the development of weapons for ABM tasks based on new physical principles (including directed-energy-transfer weapons—various forms of lasers and neutral particle accelerators) were also implemented on the basis of scientific research (and sometimes also experimental development).

The enormous resources spent on R & D for the SDI program in the 1980s did not produce any qualitative gain in the capabilities of anti-ballistic missile defense in the face of an "opponent" possessing a commensurate nuclear missile arsenal and a powerful scientific–technical potential for improving its quality.

By the end of the 1980s, Soviet–American relations as a whole involved an extremely intricate system for ensuring strategic stability, which included both a definite configuration of the forces and resources of the two sides and limitations defined in treaties on the development of individual components of strategic nuclear forces. Detailed procedures, obligatory for both sides, for monitoring the observance of agreements concerning the limitation and reduction of both offensive and defensive strategic armaments began to play a tremendous role in ensuring strategic stability.

These procedures included the use of both "national technical monitoring methods" and "on-site inspection" (which the American side particularly insisted on, considering the closed character of Soviet society). National technical monitoring methods, in common

parlance, mean various spy satellites; both sides agreed in this case not to "impede" the activity of "national technical methods," i.e., of spy satellites.

Following this logic, both sides at the beginning of the 1980s *de facto* rejected the development of anti-satellite weapon systems. The unilateral moratorium on the testing of anti-satellite weapons in space declared by the Soviet side served as a stimulus to this. The American side "tacitly" followed the USSR, and this moratorium has now lasted for nineteen years.[a]

Repeated attempts on the Soviet side to conclude a Soviet–American treaty that would prevent the development of anti-satellite weapons and the placement of striking forces in space (which could be used as both anti-satellite weapons and missile defense systems, as well as a means of destroying ground-based air and naval targets from space) were unsuccessful.[9] However, an extremely limited role in the development of space-based anti-satellite weapons was played in this case by the ABM Treaty, which forbids the deployment (and testing) in space of any weapons.

* * *

The period of two or three years after the fall of the USSR was characterized by a definite drop in the level of strategic stability, since this immediately resulted in the appearance of four *de facto* nuclear states—the Russian Federation, Ukraine, Kazakhstan, and Belarus. Moreover, Ukraine, because its territory contained a powerful grouping of the Soviet strategic nuclear forces, was almost converted, unexpectedly, into the third world power by the size of its nuclear arsenal—after the USA and the Russian Federation. Immediately after the break-up of

[a] The introduction by the USSR of a unilateral moratorium on the testing of anti-satellite weapons was announced by General Secretary Yu. V. Andropov in May 1983 at a meeting with a group of American senators headed by C. Pell. This act of the Soviet Union was initiated mainly by the vice president of the Academy of Sciences of the USSR, Academician E. P. Velikhov, on the basis of developments of the Committee of Soviet Scientists for the Protection of the World Against the Nuclear Threat; Andropov's statement was drafted by the author of this monograph.

the USSR and the creation of the CIS, it was officially declared that the "nuclear button" is under the virtually "equal jurisdiction" of the leaders of the four indicated states. In fact, it was in the hands of the Russian leaders, because the entire physical system of combat control of the strategic nuclear forces was located in Russia. Ukraine, Kazakhstan, and Belarus (as well as of the other republics of the former USSR) were devoid of all other nuclear weapons (besides strategic nuclear forces) by the end of 1991 because of the energetic and effective measures taken by the Soviet leadership and by the military command, in which work the author had a hand.[10]

The importance of this measure became clear when fairly reliable information appeared in the USA and in Russia that the Ukrainian leaders were attempting to provide themselves with technical methods that would actually give them control over the "nuclear button." An operational analysis of the capabilities available at that time in Ukraine carried out by the RF defense minister showed that this would be completely within the power of the highly qualified engineers and scientists in the former Soviet research institutes and design offices on Ukrainian territory. Parallel American and Russian efforts (including those initiated by the author) quickly succeeded in "persuading" the Ukrainian side to abandon this very dangerous idea.[a] The interests of Russia and the USA completely coincided in this situation (as was recognized by both sides), and this ensured complete success of the actions taken to prevent the sudden appearance of one more "great nuclear power" in the international community in the first half of the 1990s.

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[a] If the use of strategic nuclear armaments had come under the control of the Ukrainian leaders, the world military–political configuration would be completely different. Moreover, the danger of accidental and unsanctioned use of nuclear weapons would be sharply increased if they were in the hands of Kiev; in such a short period and with very limited financial, technical, and human resources, it would be virtually impossible to create a reliable system for controlling strategic nuclear forces that meets the highest standards (for "negative control" over such forces).

Since the end of the 1980s, from the time that the Cold War ended, there has been a significant decrease in the probability of an exchange of nuclear strikes between our country and the USA. Since then, there have more than once been situations when our relations cooled off, but the probability of nuclear conflict did not increase in these cases. However, the strategic nuclear arsenals of both sides are, as before, "oriented" mainly against each other, maintaining the most powerful inertia, amassed during the Cold War years.[a]

* * *

The political relations between the two countries have undergone radical changes for the better since September 2001, expressed, among other things, in the partnership between the USA and Russia in the antiterrorist coalition. Important positive results in this respect were produced on the whole by the Moscow summit in May 2002, during which RF President Putin and US President Bush signed the new Russo–American Treaty on Strategic Offensive Reductions. The signing of such an agreement, with all its obvious drawbacks, is apparently the most that Russian diplomacy could achieve in 2001–2 under the conditions of a sharp weakening of the national power of Russia in the preceding periods and the initial unwillingness of the George W. Bush administration to associate itself with any new agreements whatsoever in these areas.[11]

The prominent American statesman and public figure, the former chairman of the US Senate Committee on Armed Services, Sam Nunn, commented as follows on this new Russo–American document:

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[a] Even in the second half of the 1990s, almost ten years after the end of the Cold War, reports appeared in the Western press that the number of targets for the USA's strategic nuclear forces on the territory of the Russian Federation at that period had not decreased, but rather had increased; this was explained by the fact that strategic nuclear forces of the USSR had been eliminated in Kazakhstan, Ukraine and Belarus. The number of warheads in the USA's strategic nuclear forces had not been reduced. In the next twelve to eighteen months, the press started to report that the number of facilities on Russian territory, at which the USA's strategic nuclear forces were aimed, had decreased. Moreover, as reported by the American media, the number of targets on Chinese territory, marked for destruction by the American strategic nuclear forces, had significantly increased.

"The treaty and the accompanying joint declaration ensure a remarkable basis for fundamentally different relations between the United States and Russia. The joint declaration contains appeals for cooperation in virtually all spheres of American–Russian relations that can be imagined—possibly with only the exception of the joint celebration of Thanksgiving Day and Christmas. It points us in the right direction."[12]

Senator Nunn correctly points out that this most likely is a treaty of "good intentions," and if an entire series of other substantial actions do not follow it, then it is at best useless and at worst even "counterproductive."[13] Among other things, questions of verification procedures and schedules of reductions in "offensive potentials" need to be decided clearly and unambiguously.

Consolidation of the results of the Moscow summit of May 2002 will unquestionably promote the development of cooperation between Russia and the USA on "Cooperative Threat Reduction" in accordance with the legislation of Senators Sam Nunn and Richard Lugar adopted at the end of 1991. The implementation of this legislation and the significant assistance that Russia has accorded it in an extremely difficult transitional period have already seriously helped to increase strategic stability by means of a whole complex of measures.[14]

According to the document signed during the Moscow summit mentioned above, American–Russian cooperation is to be developed in the area of anti-ballistic missile defense. Russian science and industry and the Armed Forces of the RF actually have serious scientific research results and major experience in this sphere, including experience that is lacking in the USA.

However, many Russian politicians, military figures and experts have expressed serious doubts that Russo–American cooperation in this sphere can be truly equitable and mutually advantageous, taking into account the enormous asymmetry in both financial potential and political might, and in view of the unsuccessful attempt of the USA to cooperate with its

NATO allies (France, Germany, Italy) in the 1990s and until now by way of R & D in the creation of missile defense systems for the European Theater (the MEADS Program [Maximum Extended Air Defense System]). The French have already abandoned this program, while Germany suspended its participation in 2000 after sharply critical conclusions of a special commission of the Bundestag.

The new character of the relations between the RF and the USA and the construction of a democratic political system in Russia have eliminated virtually all probability of nuclear conflict between the two powers. These new relations are appealed to, in particular, by the authors of the *Nuclear Policy Review* of the US Defense Department, published in January 2002, which is presented to the US Congress annually, in compliance with the law.

The so-called "liberal theory" in the modern political science of international relations (which, as its authors justifiably point out, has repeatedly been empirically confirmed by history) asserts that "no wars have occurred between democracies." It should be pointed out here that the empirical confirmation of that theory relates largely to the Cold War period, when the democratic states were united by facing a common, serious opponent in the USSR and its allies.

Recent experience in the history of Russo–American relations (the 1990s, after the end of the Cold War, the break-up of the USSR, and in the period of explosive transformation of the Russian Federation) teaches us that they are by no means guaranteed from setbacks. Among other things, this is promoted by the fact that a high level of mutual mistrust is unfortunately maintained by a significant part of the bureaucracy and the political élite of both sides, and is reflected in society's opinion as a whole.[15]

In the USA, many believe that Russia has not yet formed a modern democratic political system. At the same time, it is pointed out that a state of enormous social inequality, which does

not exist in the most highly developed countries of the West, has arisen in the social–economic sphere.

One proponent of these views is the well-known political scientist and diplomat Tom Graham, appointed in the summer of 2002 to a high post on the staff of the US National Security Council. He writes in his recent book, that the system of political power emerging in Russia is more reminiscent of the "traditional Russian political system, than it is of modern western democracy." As a whole, this authoritative writer regards Russia positively and gives a high estimation of Russia's potential, its importance and its influence in the modern system of international relations.[16]

Serious doubts about the stability of the system of political democracy and market economy are voiced in George W. Bush's National Security Strategy of the United States of America.[17]

It should be recognized that there is a basis for such evaluations. Russia still has a long way to go to become a functional political democracy; it is only important for this development to be sustainable, with no zigzags or backsliding.[18]

The creation of a system of effective political democracy and a functional market economy in Russia must not be an ideological question, a "question of faith." The Russian "political class" and business community must recognize that democracy, with all its drawbacks, weak points, and costs, is above all the most effective present-day system of control (and self-control) of the state and of society, with various feedbacks that make it possible, as a rule, to introduce the necessary adjustments in a timely fashion.

The "administrative efficiency" of democracy was demonstrated by the victory of the West over the Soviet Union in the Cold War, which was achieved despite the many outstanding achievements of the Soviet people in science, engineering, in the social sphere, in education, etc. Such administrative efficiency of democracy, among other things, was remarkably demonstrated

in the military sphere, where the West as a whole more rationally determined the scale of the resources to be set aside for military purposes, the priorities for their distribution, and the ways and means of using military force in the interests of state policy.

Russia needs to find its place in the community of countries with developed democratic institutions, a civic society, and a market economy, without the extremes that characterize a significant part of the Russian "political class" and the Russian social consciousness.

This process is affected and will be affected to a significant extent by the behavior of the western countries, especially those that are regarded as models of democracy and the rule of law. For the development of democracy in Russia to be sustainable, it is extremely important for the western countries (and above all the USA) to demonstrate adherence to the generally accepted norms of international law, the values of democracy, and a market economy, especially free trade. It is worth noting the explanations of the US president's National Security Advisor Condoleezza Rice in the British newspaper *Daily Telegraph* of October 17, 2002, where it is emphasized at great length that the United States in its foreign and military policies depends not only on force, but on definite values— "devotion to democracy, the primacy of law, market economy, and free trade." In Rice's words, "this faith in common values and common interests creates a moment of limitless possibilities. Instead of repeating the 'historical pattern' of destructive rivalry of the great powers, we can try to achieve cooperation between the great powers with the purpose of solving problems that require multilateral participation—from terror to environmental protection."[19]

In this connection, the appeal to the role of the United Nations and the UN Security Council in ensuring international security in President Bush's National Security Strategy, which was proposed in September 2002 and in George W. Bush's clear, meaningful speech to the UN on September 11, 2002, met an extremely positive reception in Russia.

The fate of democracy in Russia could be very seriously affected by potential conflicts with the USA, and the West as a whole, as a result of ignoring the legitimate national interests of Russia and her allies, and still more by neglect of Russia's legitimate national security interests, above all along the boundaries of the Russian Federation.

Moreover, there are still figures with significant weight in the American political élite who continue to regard Russia as a state whose capabilities need to be limited (among other things, in post-Soviet space), regardless of whether or not Russia becomes a modern democratic state with a market economy.

* * *

Obvious harm was done to the Russo–American system of strategic stability in 2001 when the USA withdrew from the ABM Treaty. Russian President Vladimir Putin called this step of the George W. Bush administration a "big mistake."[a]

It is possible to agree with the position of the George W. Bush administration that the ABM Treaty is a product of the Cold War and that "under the new conditions other methods of ensuring strategic stability are needed." However, it was wrong to begin to dismantle the existing system before the corresponding replacement components of a new one appeared.

The U.S. withdrawal from the ABM Treaty does not imply a direct military threat to Russia under the conditions of the formation of partnership relations (and potentially an alliance, as pointed out, for example, by US Ambassador to Russia A. Vershbow) between the RF and the USA. The absence of a direct military threat following the USA's withdrawal from

[a] The comparatively mild official reaction of Russia to the USA's abandonment of the ABM Treaty was largely due to the fact that the relations between the two countries were on the rise at that time, and due to the understanding, by the supreme Russian leadership, that our country has a wide set of already-active and potential resources for overcoming any missile defense that may exist in the foreseeable future. However, the reaction was significantly more negative among the military leaders and a significant part of the Russian political élite.

the ABM Treaty is associated with the maintenance of a high level of ceilings on nuclear warheads on strategic vehicles; this ensures that the "dynamic range" will be maintained in the military–strategic equilibrium.[20]

However, the elimination of ABM restrictions has clearly contributed to the growth of strategic indeterminacy, not so much directly in Russo–American relations, which significantly improved after September 11, 2001, as in the system of international relations as a whole (which we shall discuss in more detail later).

"Dynamic range" allows Russia for the time being to accept asymmetry in favor of the USA within the framework of the 2002 Treaty on Strategic Offensive Reductions.

The presence of the "dynamic range" phenomenon in the strategic USSR–USA nuclear balance appeared even at the end of the 1970s, especially during the development of the process of "MIRVing" strategic vehicles (equipping them with separable, individually-aimed warheads). This sharply increased the number of deployed (combat-ready) warheads on both sides, bringing their number to 10–11,000 on each side.

Many civilian and military experts in the USA, and then in our country, turned their attention to the redundancy of such a number of warheads for accomplishing restraint by the threat of retaliation with "unacceptable damage" for the aggressor.

One active opponent of quantitative equality in warheads and vehicles at the end of the 1970s and the beginning of the 1980s was the Chief of the General Staff of the Armed Forces of the USSR, Marshal of the Soviet Union N. V. Ogarkov. Ogarkov also attempted to achieve a "more restrained" approach to creating new strategic arms systems simply because the USA was creating them. In discussions with the author in the early 1990s, Ogarkov said that he considered that military–strategic equilibrium with the USA under the conditions prevailing at the end of the 1970s and the first half of the 1980s (and later) could be completely ensured in principle by having a factor of 3–4 fewer warheads on strategic vehicles and

without creating such complexes as the combat rail-based missile complex (SS-24), and the marine-based Typhoon system (Akula), with a gigantic submarine with a displacement of more than 40,000 tons.

Ogarkov managed to achieve moderation in the development of strategic nuclear forces in favor of building up forces involving the creation of the newest conventional means of armed combat, especially "smart weapons," the appearance of which the USA called a "revolution in military affairs."

Smart weapons became a symbol of American triumph in the course of the Persian Gulf War and the prosecution of Operation Desert Storm in 1991,[a] *although its actual contribution to the solution of combat problems was much less than was claimed by the mass media.*

Unfortunately, Ogarkov lost in the confrontation concerning these very fundamental questions of military strategy and force development to his immediate superior, a member of the Politburo of the Central Committee of the Communist Party of the Soviet Union, Defense Minister D. F. Ustinov (who had obtained the rank of Marshal of the Soviet Union from Brezhnev, when the latter appointed Ustinov, a civilian, to the ministerial post) and to his first deputy, Marshal of the Soviet Union S. F. Akhromeev.[b]

This loss of Ogarkov to Ustinov cost the Soviet Union dear, since it prolonged the arms race with the USA in all areas, even though the latter had no more than half the resources of the United States. Exhaustion of the USSR in the arms race with the USA (including in the nuclear sphere) became one of the most important causes of the crash of the Soviet economy at the end of the 1980s and of the collapse of the Soviet state.

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[a] The foundation of such a triumph for the USA and its allies was laid long before the events of 1998. The most dynamic period of the development and testing of new weapon systems in the USA was the second half of the 1970s. The main breakthroughs in this area are mainly associated with the activity of the US Deputy Secretary of Defense William Perry, a civilian scientist and engineer of highest grade, who enjoyed the great trust and respect both of US Defense Secretary Harold Brown (a well-known physicist) and of leading figures of the US Congress.

[b] One should also keep in mind the deep conflict between D. F. Ustinov and N. V. Ogarkov relative to the introduction of Soviet troops into Afghanistan in 1979, which Ogarkov opposed as much as he could. This was extremely courageous on his part at that time.

Turning to the significance of U.S. withdrawal from the ABM Treaty of 1972, it should be pointed out that the absence of this treaty may affect the problem of the security of spacecraft, including the most important infrastructure elements for assuring stability at the strategic nuclear level. The elimination of the ABM Treaty directly reduces a very significant part of the limitations on the testing and placement of various forms of attack weapons in space. [Any such weapon, before it becomes capable of destroying such complex targets as ballistic missiles (not to mention cruise missiles), acquires anti-satellite capabilities.]

The new U.S. policy with respect to activity in space, that began to be formulated in 2001–2, seems at best ambivalent. On one hand, it is proclaimed that all space systems for civilian and military tasks have special significance, and it is pointed out that they are highly vulnerable to the anti-satellite activity of opponents (and direct mention is made of the People's Republic of China increasing anti-satellite weapons capabilities). On the other hand, extremely strong hints are given that the USA itself will not refrain from developing such means of destruction and military resources to protect its own spacecraft. Regarding the latter thesis, it can be pointed out that it is even more difficult to install a fairly effective active local defense system for spacecraft than it is to create any limited local ABM defense system. It can thus be assumed that U.S. military policy and strategy may involve other resources and methods, and the possibility of mounting pre-emptive strikes on the forces and resources of other countries, that can be regarded as a threat to US activity in space, cannot be ruled out (taking into account the principle of pre-emptive action in the case of a threat to the most important interests of the national security of the United States, laid down in 2002, in the National Security Strategy).

* * *

A special topic in Russo–American interaction in the nuclear sphere is the problem of a "nuclear strike by mistake," involving accidental or unauthorized use of nuclear weapons. In the

last ten to twenty years, especially in the 1980s, both sides did an enormous amount of work to increase the reliability of the systems (the technical resources, procedures, and personnel) for monitoring the use of nuclear munitions—from strategic weapons to resources on the battlefield.

An important role was played by parallel unilateral measures by the USSR and the USA in 1991 with respect to tactical nuclear munitions, whose number in specific theaters of war was radically reduced.

Nevertheless, constant, purposeful and systematic work to enhance control and monitoring of nuclear weapons is still needed from the highest state leadership, in order to prevent accidental or unauthorized use.

As "old nuclear powers," Russia and the USA are called upon in this respect to set an example to other states with less experience in this extremely responsible and dangerous sphere.

It must be recalled in this case that the control of nuclear forces and resources always involves a built-in contradiction between the requirements of battle-readiness on one hand (including special requirements on preparedness for a sudden pre-emptive strike, a retaliatory counterstrike, or a counterstrike) and the requirements of reliable "negative control," which makes it impossible for nuclear weapons to be used without a general decision and the direct authorization from the highest state leadership, on the other. The more "locks" are put in place to ensure negative control, the lower the efficiency of the use of nuclear weapons.

The system of rights and responsibility for the use of nuclear weapons was formed in the years of the most acute confrontation and of preparation for total war, the Third World War, which in its totality would exceed everything that went before it in the history of mankind. Having *de jure* concentrated immense, unprecedented power in the hands of one man (the head of state), the system demands special qualities from the corresponding leaders. This includes, most importantly, a high degree of resilience to stress, followed by knowledge of the

mechanisms of escalation and de-escalation of conflicts, and the mechanisms for controlling one's own armed forces (which, as history teaches, have more than once had a tendency to escape from under the control of civilian political leaders during acute crises).

The system designed to control nuclear forces and resources must have a civilian–military character. One of the most important elements for ensuring reliability and stability of control in the nuclear sphere is the presence of a civilian defense minister, with appropriate deputies and a strong staff.[21] (This has more than once been remarkably demonstrated in the USA by such figures as Robert McNamara, James Schlesinger, Harold Brown, William Perry, and a number of others.[a])

In this case, despite widespread misconceptions in Russia, the civilian secretary of defense in the USA provides not only unified political and administrative control, but also direct tactical control of the armed forces of the USA in the chain of the strategic control system: President–Defense Secretary–Unified Command of the Armed Forces of the USA, including the Joint Strategic Command in Omaha, created in 1992.[22] *This "command chain" was established by the special Goldwater–Nichols law, passed in 1986 after many years of discussion and after working out numerous details.*

A civilian Secretary of Defense is not always a greater "bird of peace" than the highest generalship subordinate to him. Institutionally (and functionally), the Joint Chiefs of Staff or the General Staff and the staffs of the branches of the armed forces simply play a different role

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[a] One can say that the historical role played by US Secretary of Defense McNamara in the resolution of the Cuban Missile Crisis was extremely important. First, he proposed (and actively championed) the idea of initially introducing a sea blockade ("quarantine") against the further placement of Soviet nuclear weapons in Cuba instead of inflicting airborne strikes on USSR missile emplacements in Cuba (which the top military commanders, and especially the Air Force Chief of Staff, General Curtis LeMay, insisted on). Second, on behalf of President John F. Kennedy, he rigidly monitored the Command of the US Navy as it implemented the blockade, in order to avoid actions that would lead to escalation of the conflict, which would be extremely dangerous under these conditions. Having received orders from the president—the commander-in-chief—to carry out this "quarantine," the Navy Command acted according to "standard operating procedures," which were formulated and practiced in the pre-nuclear era. They saw no need to depart from these procedures, even though the conditions and the "stakes" had become quite different.

than does the civilian leadership of a military department, and possess a quite different collective and individual mentality than does a civilian leader. The highest statesman (the president or prime minister) cannot effectively control the armed forces "directly" (with the possible exception of a total-war situation like the Second World War—the Great Patriotic War for our country). The commander-in-chief, in the person of this highest statesman, acutely needs a link such as the civilian leadership of the Defense Department/Ministry. This is necessary for the transformation of political policies and goals into decrees, orders, and directives that can be understood by military staffs and that correspond to the mentality of the military, the prescribed norms of the armed forces, battle regulations, and manuals on the conduct of operations. This function is especially important under crisis conditions, the more so when the use of nuclear weapons is threatened.

* * *

The 1990s showed that, even in the conditions following the Cold War, there is a danger of serious political crises that threaten to escalate into military–political standoff in the relations between Russia and the USA. An example of this is the situation in connection with the aggression of NATO in Kosovo in 1999, with actions undertaken contrary to the position of Russia and circumventing the UN Security Council.

As rightly stated in the detailed study of the Center of Military–Strategic Studies of the General Staff of the Armed Forces of the Russian Federation, as a result of this aggression by NATO, "the most acute confrontation between Russia and the countries of the West since the mid-90s developed into a serious political crisis."[23]

A rather unusual "subcrisis" arose within the framework of this war, associated with the reaction of the commander-in-chief of the combined NATO armed forces, General Wesley Clark, to the "sprint to

Pristina" by the Russian peacemakers from Bosnia, carried out in accordance with a decision of the Russian state leadership.[a]

Such a drastic reaction of the NATO combined forces could at once advance conflict between the RF and NATO by several steps on the "escalation stairway". It is impossible to exclude the possibility that the conflict could immediately jump to the nuclear level, due to the enormous asymmetry and imbalance in general-purpose forces in favor of NATO and the USA, and due to the approximate equality shared by the sides at that time, simultaneously in strategic nuclear forces and other forms of nuclear weapons. This seems quite possible, even taking into account the psychological features of a number of the people who would be among the chief participants of such a conflict.[24]

As testified by Wesley Clark in his very thorough book, his energetic actions for confronting Russia with military forces were blocked by his direct subordinate in this region, three-star British General Sir Michael Jackson. The latter refused to carry out the order of the NATO commander-in-chief, saying to Clark, "Sir, I'm not going to start the third world war for you."[25] Some time after, the commander-in-chief of the NATO forces, Wesley Clark, was removed from his post—actually for exceeding his authority during this crisis.

The political consequences of the "sprint to Pristina" by Russian peacemakers from Bosnia were smoothed out by subsequent diplomatic negotiations. The goals set by the

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[a] This "subcrisis" broke out only a few days after this war ended, because of the Ahtisaari–Chernomyrdin mission, without NATO starting a ground-based operation in Kosovo, which would have been extremely difficult and costly for the West in both military and political terms. Moreover, as pointed out by the well-known American political commentator David Halberstam, for the first time in history, a victory was achieved by the actions of aircraft alone. A number of authoritative Western authors justifiably declared that it was Viktor Chernomyrdin's pressure on Yugoslav President Slobodan Milosevic in accordance with the instructions that he received from the supreme Russian leadership that in fact compelled the Yugoslav leadership to refrain from further resistance. This potentially saved many lives, including those of citizens of the USA and other NATO members. See, for example, Halberstam, D. *War in a Time of Peace. Bush, Clinton and the Generals.* New York: Scribner, 2001, pp. 476–8.

initiators of the "sprint to Pristina," to ensure Russian peacemakers held comparatively independent positions in Kosovo, were not implemented.[a]

The "lessons of Kosovo" undoubtedly deeply imprinted themselves in the consciousness of certain elements of the Russian "national security establishment." Among other things, this was reflected in high hopes for the role of nuclear weapons in ensuring the security and national sovereignty of Russia. This is reflected in the language of a number of official public documents concerning Russia's military policy.[b]

* * *

As a whole, relations have been established between Russia and the USA in the 1990s and the beginning of the current decade, which minimize the probability of nuclear conflict between these countries in the foreseeable future. However, as previously, constant, carefully considered and purposeful efforts are needed, in order that the probability of such conflicts does not increase.

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[a] As noted in the studies of the Center for Military–Strategic Studies of the General Staff of the Armed Forces of Russia mentioned above, what was accomplished, the military believed, by the "sprint to Pristina," was later completely lost by the Russian side during diplomatic negotiations.

[b] In some degree, this was triggered by individual pronouncements on the American side: when Russia's representatives at various official and unofficial forums started saying that concerns had arisen in the Russian "political class" that the next target of such an operation would be Russia (or one of its allies within the CIS, for instance Belarus), Russia's representatives heard in response "Oh, you have nothing to fear [from such actions]; you are a nuclear power."

2. Concerning the Russo–Chinese "nuclear interaction"

Nuclear war (and conventional war) between Russia and the People's Republic of China (the PRC) is extremely unlikely. The relations between these two countries have also won significant positive reinforcement in the past twelve to eighteen months in both the political and the military spheres.

This new level of relations is symbolized by the Russo–Chinese Good Neighborly Treaty of Friendship and Cooperation, signed in Moscow in 2001 and unprecedented in international affairs of the past 10–12 years. There is special value in the complete renunciation by both countries, specified in this treaty, of any territorial claims against each other on the entire extent of the Russo–Chinese boundary of 3,645 km. Taking into account the traditional sensitivity of China to the territorial problem, the questions of Chinese sovereignty with respect to a number of territories considered disputable, and the increased sensitivity of the Russian Federation to the territorial question since the break-up of the USSR, this posture can actually be regarded as a pact of special historical importance, especially since China has similar agreements with practically none of her other neighbors.[a]

By signing this agreement, China renounced any claims to an enormous territory now occupied by subjects of the Russian Federation, such as the Primorsky Kray, the Khabarovsk Kray, the Jewish Autonomous Region, and the Amur Oblast.[26]

[a] At the same time, it should be pointed out that, beginning in 1996 (especially since the visit of Chinese President Jiang Zemin to India in November 1996), a kind of "disengagement" of the armed forces of China and India in the Himalayas has occurred, the boundary question between China and Viet Nam was settled in part of the land boundary, and a number of other, similar questions were resolved.

The signing of this treaty preceded a number of other important Russo–Chinese agreements that substantially improved the relations between the two countries, including in the political and military sphere.

Among other things, measures were taken to increase strategic stability at the level of the multipurpose forces in the zone where Russia and China have a common border in the Far East, and in the Baikal region, in accordance with the corresponding Russo–Chinese agreement of 1996. The measures stipulated by this agreement substantially limit the offensive capabilities of the corresponding groupings of the armed forces of both countries.

These measures have allowed China and Russia to concentrate their intellectual, organizational, and financial resources on higher-priority strategic areas.[27]

On the Russian and Chinese side, this was done with full understanding that the strengthening of strategic stability at the level of multipurpose forces (equipped with conventional weapons and tactical nuclear weapons) will also strengthen the strategic stability at the nuclear level, including at the level determined by the capabilities of strategic nuclear forces and by the policy regarding their use (and the threat of their use).

This allowed Russia, among other things, to make a rational decision not to further reduce the "nuclear threshold" in its doctrinal directives (as was done when updating the "Military Doctrine of the Russian Federation" in 1999–2000).[28]

The reduction of the offensive capabilities of the two sides as a result of the "disengagement" of the multipurpose forces of the RF and China along the Sino–Russian border is a clear example of measures aimed at strengthening strategic stability under the conditions of the international relations established since the end of the Cold War. This kind of measure was seriously considered in the mid-80s, as applied to the relations between NATO and the Warsaw Treaty Organization (in order to give the confrontation of the two powerful

groupings of the WTO and NATO forces in Central Europe a less pronounced offensive character). Conceptually, these measures were reflected in a new military doctrine of the Warsaw Pact, in the development of which the author had the opportunity to very directly participate.[a]

One of the most important problems in formulating the new military doctrine of the Warsaw Pact in 1996–98 (and of the USSR for the European Theater) was to prevent a rupture between its defensive character in its political (declarative) part, and its offensive (counteroffensive) character in the military–strategic (operational–strategic) part. The author and his proponents in this case reasoned from the fact that a non-offensive character of the grouping of men and equipment of the WTO in Central Europe would be less burdensome for the economy of the USSR and its allies in the WTO. In part, with reference to a number of theoretical developments and historical examples, the doctrine of the WTO was successfully reformulated by a civilian scholar in interaction with the Ministry of External Affairs of the USSR and the Armed Forces General Staff of the USSR.[29]

The powerful grouping of Soviet troops in Germany, Poland, and Czechoslovakia had a pronounced offensive character in its tactical composition (including being equipped with the newest equipment) and the character of its battle readiness and dispositions (shock armies, tank armies, etc.). The second strategic echelon had a similar character, especially the groupings in the Carpathians and the Belarussian military districts.

The Soviet leaders had virtually no political plans for using strategic offensive operations in Europe since the end of the 1960s. USSR policy in Europe (and vis-à-vis the USA) and military–strategic preparations lived largely separate lives.

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[a] Extremely constructive roles were played here by the head of the General Staff of the USSR Armed Forces, Marshal of the Soviet Union S. F. Akhromeev, by the deputy chief of the General Staff of the USSR Armed Forces, Army General M. A. Gareev, by the chief of the Contract-Law Directorate of the USSR Defense Ministry, General-Colonel N. F. Chervov, by USSR Deputy Minister of Foreign Affairs V. F. Petrovskii, and

In studies on the Soviet side, the staffs constantly considered a version of sudden attack on the side of the West that relied above all on its predominance in air power (assuming the achievement of dominance in the air by the Western forces).

Dismantling of the tremendous offensive capabilities of the USSR and its allies in Europe (especially in Central Europe) resulted from the crash of the regimes in Eastern Europe and the reunification of Germany.

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As a whole, it can be concluded with confidence that nuclear conflicts in the relations of the Russian Federation and China are extremely unlikely in the foreseeable future. They have no spheres of conflict that could activate the "nuclear argument," and the sides have successfully minimized possible "trigger elements" that could lead to a situation in which one or both sides would consider the possibility of using nuclear weapons, even as an argument in a dispute, following the chain of "political conflict (including a boundary conflict)—armed conflict with the use of conventional armed forces—nuclear conflict."

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by the chief of the Directorate of Planning of External Political Measures of the USSR Ministry of Foreign Affairs, L. Ya. Mendelevich.

3. "Nuclear antagonism" in American–Chinese relations

The unlikelihood of war with the use of nuclear weapons between the USA and China can be spoken of with less confidence, even though the likelihood of conflicts in which these most competitive powers (for the time being, predominantly in the Asiatic–Pacific region) may approach the "nuclear threshold" can be ascribed to the more remote future. It must be kept in mind in this case that China and the USA are two "old nuclear powers" with developed procedures of strategic control, including measures for "negative control" over nuclear weapons.

At the same time, the history of the "nuclear interaction" between China and the USA has not had such an acute and instructive crisis as the Cuban Missile Crisis of October 1962, mentioned above.[30] In addition, there has been no long period of agreement of views on the problems of ensuring strategic stability, which to a significant extent has been reflected in the series of Soviet–American and Russo–American treaties noted above, on the limitation and reduction of strategic offensive armaments, on medium- and short-range missiles, and on the limitation of ABM systems.

The corresponding fine mechanisms, including numerous communication channels and procedures for contact between the highest leaders when acute conflict and crisis situations occur (such as those developed in the interaction between the USSR and the USA), have not been developed in the China–USA interaction.[31]

One should note carefully the Chinese political declarations concerning nuclear weapons and their usability. As pointed out in an official publication of the State Council of the PRC, "from the first days of the possession of nuclear weapons, China in all seriousness declared that it never, and under no circumstances, would use nuclear weapons first." Later

China "with no preconditions engaged not to use nuclear weapons and not to threaten to use them in relation to non-nuclear countries and nuclear-free zones."

China has signed and ratified the "Treaty for the Prohibition of Nuclear Weapons in Latin America and in the Caribbean," the "South Pacific Nuclear-Free Zone Treaty," and a supplementary Protocol declaring Africa a nuclear-weapon-free zone. In April 1995, China issued an official declaration in which it engaged with no preconditions to provide to non-nuclear states and nuclear-free zones a passive guarantee of security and for the first time engaged to provide an active guarantee of security.[32]

However, China subscribed to the Treaty on the Non-proliferation of Nuclear Weapons only in 1992. This served as one of a number of grounds for a number of Western and Indian figures to accuse the PRC that, by not subscribing to that very important treaty, China was cooperating with Pakistan in forming a basis for it to create its own nuclear weapons.

China participated in the discussions on the Comprehensive Test Ban Treaty "from the start to the finish" and signed this treaty on September 24, 1996—on the day the treaty was opened for signing.

In 1994 China officially transmitted to the USA, Russia, Great Britain, and France a proposal for a Treaty on the Non-First Use of Nuclear Weapons. In the mid-90s, China and Russia gave each other mutual commitments not to use nuclear weapons first.[33]

Since the end of the 1990s, many prominent conservative Republicans in the USA (including some who entered the George W. Bush administration in 2001) have actively cast doubts on the veracity of the Chinese leaders and top military commanders relative to the policy of non-first use of nuclear weapons. These doubts were based on the argument that the Chinese strategic nuclear forces have until now possessed inadequate viability, in the opinion of

American specialists, against a massive pre-emptive strike targeted against them.[a] This argument is quite worthy of attention. However, first, there are other estimates of the degree of vulnerability of China's strategic nuclear forces in the case of a pre-emptive strike by the US. Second, even if Chinese strategic nuclear weapons had the high degree of vulnerability ascribed to them by a number of American experts, the supreme leaders in Peking would hardly have any plans to use nuclear weapons first. It is obvious that their first use against the USSR or the USA (or their primary allies) would mean a total national catastrophe for China because of the enormous preponderance over that country. It is possible to hypothesize the first use by the Chinese of nuclear weapons, against those states that are not allies of the USSR (Russia) or the USA and are at the same time significantly weaker than China in military power as a whole, in multipurpose forces. In the overwhelming majority of cases, China can solve "its own problems" in its interrelations with these states, without resorting to nuclear weapons and without threatening to use them.

The use of Chinese strategic nuclear forces in a response counterstrike, and all the more in a counterstrike, looks even less likely because China (unlike the USSR and the USA) has never had a missile-attack warning system, which would inform the Chinese leaders of a missile attack on China with at least a minimum warning time.

New indeterminacy with respect to mutual nuclear deterrence of the USA and China is introduced by the George W. Bush administration's withdrawal from the Soviet–American ABM Treaty. The creation of a strategic ABM defense system, intended to defend objects on US territory with various versions of ABM systems in theaters of war in the immediate vicinity of boundaries with China (in Japan, in South Korea, on Taiwan, or in the seas around Taiwan)

[a] In a retaliatory strike, Chinese forces, even with extremely heavy losses from a pre-emptive strike from the other side, are capable of using their nuclear weapons to strike a significant number of military targets of the USA in East Asia, as well as several large cities on the territory of the USA itself.

is capable, at least virtually, of significantly reducing the value of the Chinese potential for nuclear deterrence. The appearance of components of missile defense systems that might destroy Chinese missiles on the boost section of the missile's trajectory is considered especially dangerous in China.

Following the logic of the development of China in the last 15–20 years, the Peking leadership faces a serious dilemma—either to tacitly agree with the appearance of such virtual reality without sharply increasing the number of their strategic nuclear forces and other nuclear forces and facilities intended to deter the USA, or to vastly increase their strategic nuclear forces, making a jump from 18–20 deployed warheads on strategic vehicles of intercontinental range not just to 100 units, but to 200–300 or an even larger number of warheads. (Opinions have popped up in a number of recent American publications that, when there are several missile defense systems protecting the USA, it will not be a problem if China increases the number of nuclear munitions on strategic vehicles capable of reaching US territory to 100 units.)

The first version looks preferable in the eyes of those in Peking, who consider an overt build-up of the military power of China premature from the viewpoint of the long-term (and super-long-term by European standards) national goals of China. The adherents of such an approach reason from the fact that a rapid, sudden build-up of China's strategic nuclear forces and of other components of China's military might will cause a sharply negative reaction in the USA and many other countries, potentially including the Russian Federation.[a] The reaction will

[a] According to estimates by the CIA published in January 2002, China could have seventy-five to a hundred ICBMs with mobile launch by 2015. Reacting to the appearance of these estimates, one of the Chinese deputies of the Minister of Foreign Affairs stated that "I have no detailed information concerning exactly what is contained in this CIA report, but, in my view, such statements are baseless." In this case, he made the very important remark that China intended to strengthen its defensive power "in accordance with its requirements." See "Kitai uspokaivaet TsRU: rakety budut napravleny na SShA tol'ko v sluchae neobkhodimosti" ["China reassures the CIA: Missiles will be directed at the USA only in case of necessity"].

undoubtedly be negative in such a country as Japan, as well as in a number of western European countries, which, when the number of nuclear warheads on Chinese intercontinental range vehicles is increased, will consider that, in contrast to the preceding decades of Chinese nuclear policy, they are also among the targets of the Chinese strategic nuclear forces.

However, non-reaction by China to the creation of missile defense systems by the United States could turn into a "loss of face" for Peking in the nuclear sphere, especially in the eyes of their Asian neighbors. The traditional Chinese political and military–strategic culture decisively rebels against this. It is very hard to compensate and restore a "loss of face;" this can take more than one decade and more than one generation.

The Chinese leaders (regardless of whether they belong to the new or old generation, or to the "conservatives" or "liberals") will hardly allow such a "loss of face." The Peking leadership, taught by millennia of Chinese civilization, has never entertained illusions relative to the fact that relations in the modern world depend upon strength.

Not to allow a "loss of face" or to look weak in the face of a threatening "rival" (and not a "strategic partner")—the USA—and at the same time not to provide grounds for a sharply negative reaction to the growth of Chinese strategic missile and nuclear strength to all the main subjects of the system of international relations is the most serious dilemma for the highest state leadership and military commanders of the PRC in the immediate future.[a]

A "jump" by China in the development of strategic nuclear might is extremely probable and inexpensive for the Chinese economy, which was, according to a number of Western

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LENTA.RU: Rubric: 'V mire': http://lenta.ru/world/2002/01/10/dismissed/10.01.2002 ; Il'in G. "Ugroza s Vostoka. Éksperty TsRU opasayutsya kitaiskogo yadernogo oruzhiya" ["Threat from the East. CIA experts fear Chinese nuclear weapons"]. *Izvestiya*, January 11, 2002, p. 3.

[a] Certain experts assume, and not without justification, that Peking made a big mistake at the end of the 1980s and the beginning of the 1990s, when decisions were not made to build up the strategic nuclear forces of the CPR in stages, calculated for 10–12 years. If the build-up had been extended in time and if it had been carried

estimates, in second place by GDP, after the USA in 2001 (allowing for parity of purchasing power).

An increase of the number of nuclear warheads on Chinese strategic vehicles to 200–300, first, would demonstrate the capability of overcoming even in a weakened retaliatory strike those missile defense systems which the USA plans today to create in the next 10–15 years. Second, it would mean an enhancement of the status of China as a great power, since China would then have greater capabilities than the other two "old nuclear powers" of France and Great Britain, and would approach the Russian Federation, in which a more significant actual reduction of nuclear arsenals is not impossible, due to budgetary and economic limitations. With such a spurt, India will hardly be capable of matching China at similar scales within the current decade.

It is obvious that such a turn of events will not be taken calmly by the USA. However, the magnitude and character of Washington's reaction will largely depend on what administration is in the White House and how the US Congress is made up at the time of the Chinese missile–nuclear "spurt" and on the results of the unfolding "war with terrorism."

A change in China's nuclear policy will cause sizable "negative emotions" in Japan, North Korea, and other nearby countries. However, one can hardly expect any independent actions in connection with this from Japan and North Korea in the next 5–7 years, because these countries will continue to be strongly dependent on their alliance relationships with the USA for the foreseeable future.

The more remote future can bring a radical change in the policy of these countries, including a change in the nuclear sphere. Very important changes in public opinion occurred in Japan in 2001–2, generated mainly by domestic circumstances and by the deteriorating position

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out against a different political and military–strategic background, it could have created a quite different basis

of Japan in the world economy. The question of a radical reconsideration of Japanese foreign and defense policy is raised with increasing frequency (including in the core of the political élite) in Japan, including a reconsideration of the relationship to nuclear weapons and the possibility of creating their own missile and nuclear arsenal.

An example of the expression of such moods is the statement of the General Secretary of the Cabinet of Ministers of Japan, Yasuo Fukuda, in early 2002, when he spoke in favor of the rapid acquisition by Japan of her own nuclear weapons. In this case, as noted by attentive observers, Prime Minister of Japan Koizumi refused to publicly distance himself from Yasuo Fukuda.[34] *This statement went virtually unnoticed in the Russian Federation, but it caused a strong public and private negative reaction in China and a number of other Asiatic states.*

An impulse in this direction was provided for Japan by the launch of a North Korean three-stage ballistic missile in August of 1998.

Doubt in the reliability of the American guarantees of the security of Japan is being expressed more and more often. These moods may crystallize in the course of the current decade into a radically different foreign and military policy of this power. An attentive observer will notice that the Japanese élite are increasingly dissatisfied with the fact that Japan possesses incomplete sovereignty. The USA is beginning to regard this with ever greater attention in the "national security establishment," where for a long time Japan has been classified as a "threshold country," assuming that Japanese science and industry have the capability to quickly develop and deploy nuclear munitions and effective means for their delivery (including those of intercontinental range).

Even without that the nuclear issue, the continuing growth of the Chinese economy and the incipient active modernization of the National Liberation Army of China and the Chinese

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for relations with the USA at the beginning of the present decade.

defense industry causes great anxiety in Tokyo. Japan does not yet have an adequate doctrinal response to this, or the necessary financial resources. Uncertainty is increasing among the Japanese political élite with regard to the reliability of the USA as the "senior partner" and "strategic protector" of Japan.

It can be repeated once again that this kind of mood is not yet capable of radically changing the Japanese national security policy, which heavily depends on the USA. (Japan has demonstrated total loyalty to the USA in the "war on terror," at the same time using the situation to move forward to eliminate the limitations on its own military activity that have existed for the entire last decade. Japan has been successful in achieving something in this respect in 2001–2.)

However, they need to be more fully taken into account in Russo–Japanese relations, without reducing these relations to the problem of the "northern territories." In particular, it is possible for Russia and Japan to cooperate more closely on questions of security on the Korean Peninsula, including the question of the non-acquisition by North Korea, of its own missiles and nuclear munitions. This would be in accordance with the national security interests of both Russia and Japan, as well as of other interested countries of the region, including China and North Korea.[a] The new trends in the social–political moods of Japan need to be kept in mind in both the Russo–American and the Russo–Chinese interaction in the Far East.

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The most likely line of conduct of the Chinese leadership in the next several years will be to demonstrate that China is technically capable of overcoming the proposed missile defense systems of the USA and of increasing the combat resilience of its strategic nuclear forces

[a] In 1998, the author happened to witness the extremely sensitive reaction of Tokyo to the testing of a North Korean long-range ballistic missile. This was perceived in Japan almost as a turning point in the development of the military–political situation in that region of the world.

grouping (including its transition from a "monad" in the form of ICBMs to a "dyad" consisting of ICBMs plus submarine-launched ballistic missiles). It would appear that the Chinese leadership will in this case carefully follow the implementation rate of all plans to create any versions of missile defense systems—both on territories of the USA and theaters of war. (There is still much that is not determined in the plans for creating these systems, starting from the question of the architecture of such missile defense systems, their main components, the deployment locations of the main complexes, etc. It seems quite possible that, once again, tough opposition may arise to specific plans for creating ABM defenses inside the USA.[a])

One of the critical factors for the Chinese leadership may be the American decision to create a missile defense system in which the interceptors are equipped with nuclear munitions of a new type. This can increase the energy of the ABMs built by the USA by several orders of magnitude, as has recently been discussed ever more frequently in the professional scientific and military–political press in the USA. There is much that points to the fact that it is for this purpose that the question of renewing full-scale nuclear testing is being considered in the USA: in order to create nuclear munitions with minimum side effects, above all with minimum energy output in the form of an electromagnetic pulse (which is capable of doing serious harm to one's own installations, both civilian and military, including radar stations and other detection, guidance and target marking equipment belonging to one's own missile defense system).

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[a] On the eve of the events of September 11, 2001, this opposition was formidable in the US Senate. The Democratic leaders formulated a number of conditions, under which they believed that further progress could be made in creating ABM systems. These conditions, in fact, were such that they blocked even the development of a number of the most important components of the ABM systems. The opponents of the creation of missile defense systems in 2001 planned to do the same thing that their predecessors did with respect to Reagan's Strategic Defense Initiative, which never left the research stage (and partly the development stage) in the 1980s.

Accordingly, the probability of not only virtually, but also actually, "nullifying" the Chinese strategic nuclear potential in this case would increase significantly.[a]

Since the end of the 1990s, China has more than once demonstrated new technological achievements in the creation of intercontinental range equipment. Thus, a parade in honor of the fiftieth anniversary of the People's Republic of China in 1999 included the Dunfen-31 ICBM with separable warheads with individually-targeted combat units with mobile launch (PGRK). (American analysts expect it to be deployed by the middle of the current decade.[35]) This ICBM is simultaneously a new method of overcoming ABMs and a method of ensuring high viability and combat resilience of strategic nuclear forces.

A long-range submarine-launched ballistic missile has subsequently undergone successful tests in China. (According to American data, China is also successfully developing a long-range cruise missile.) As a whole, these tests and the demonstration of this equipment show that China is capable of acquiring a more powerful and more invulnerable grouping of strategic nuclear forces. This would materially corroborate the Chinese doctrinal position on the non-first use of nuclear weapons.[b]

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[a] Both Japan and South Korea regard with increasing attention such a possible version of the development of ABM weaponry since, if such weapons are created, the creators of the ABM defense will try to guarantee that the ballistic missiles are intercepted using nuclear munitions (comparatively "low-yield," with comparatively small energy output in the form of electromagnetic pulses) not over US territory, but as far as possible from it, including extremely close to the territory of the leading American allies in the Asiatic–Pacific region and the Russian Federation. In this case, it is possible that, when the warhead of the interceptor missile explodes, the warhead of the intercepted rocket, with a far more powerful warhead (or warheads), will detonate with a significant output of energy in the form of an electromagnetic pulse (EMP) and even a "super-EMP" that has a radically more powerful effect on civilian electronic and electrical systems in the corresponding radius of impact.

[b] The Chinese leadership announced as early as the beginning of the 1960s that it adheres to the principle of the non-first use of nuclear weapons. The leadership of the Soviet Union made a similar an announcement a significant length of time later. Such unambiguous announcements have never been made by US leaders. In the course of numerous debates on this question between Soviet and American official representatives and scientists, in which the author had occasion to take part, the Americans explained their refusal to unambiguously assume the obligation of the non-first use of nuclear weapons by the fact that the USSR and the WTO possessed "overwhelming superiority" in Central Europe. According to their logic, the only way to stop a successful attack by a powerful grouping of Soviet troops and troops of the other countries of the

The creation of such facilities is perceived by the "national security establishment" in the USA as strengthening the accent on nuclear deterrence specifically with respect to the United States, by comparison with what took place in the past, when a strong emphasis was placed on the means of restraining the USSR (The Russian Federation) and India.[a]

In the case of build-up of the grouping of strategic nuclear forces in China, such a build-up period could be considered a "transitional process" from one state of the system of international relations to another. It has been empirically proven that in both technical and social systems this period is characterized by the greatest degree of instability and indeterminacy.

It should not be ruled out, that China will attempt to create its own missile defense system—both to shield the launch sites of the ICBMs and to defend the most important center of governmental and military–strategic control, science, and industry: Peking, among other locations. One approach for China in the new structuring of their strategic forces is to build up their grouping of strategic offensive armaments at significantly smaller scales (not going beyond the limits, for example, of 100–120 warheads on intercontinental vehicles), but placing a strong accent on the development of ABM defense. In this case, the architecture of the ABM defense system could be such that it would shield not only the administrative-industrial center of the country (Peking), but also the launch sites of the Chinese ICBMs and bases housing strategic

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WTO (here the troops of the National People's Army of the GDR were particularly distinguished by their high quality) was to use various forms of nuclear weapons, beginning with comparatively low-yield "battlefield" weapons (mainly for 155-mm caliber artillery). Both then and now, most experts were inclined to believe that the operational use of the principle of non-first use of nuclear weapons, formulated at the highest governmental level (at the supreme-strategy or "big-strategy" level), is not supported in China, as mentioned above, by the corresponding organizational and technical measures and resources at military–strategic, operational, and tactical levels (assuming that one may speak of "tactics" as applied to the use of such supreme-strategy resources as nuclear weapons).

[a] In the summer of 2002, according to press reports, the PRC tested a modernized medium-range ballistic missile, which is predominantly regarded as a means of restraint with respect to the Russian Federation, India, and a number of other Asiatic states (Japan, South Korea, Viet Nam) (and with

submarines. Moreover, in the eyes of Peking, this would decrease the vulnerability of the Chinese grouping of strategic nuclear forces that face a potential pre-emptive "disarming" strike by the USA and would simultaneously reduce the possibility of a "decapitating strike" aimed at the highest government leadership and the top military commanders.

Such a formula for the development of Chinese strategic forces requires significant intensification of work in the area of missile defense and entry, in the coming years, into the stage of intensive tests of interceptor missiles, of the corresponding radar stations, and of a system for the tactical control of missile defenses.

In any case, China, it would seem, has to start creating its own missile attack warning system. Such a system has been virtually absent in China for a long time—at least in the form possessed by the USA and the Russian Federation.

It should be noted that, from a technical viewpoint, a missile defense system and a missile attack warning system are significantly more complicated technically than the equipment for the strategic offensive forces that was until recently under development in China (even taking into account the extremely high technical level of the new Dunfen-31 ICBM). For ABM systems, the systems integration of the combined strike, information, and control components into a unified working complex is of special complexity. This means that China is more prepared technically for a jump in the deployment of its own strategic offensive forces, than to create a missile defense system. (It should be recalled that at one time even such technically advanced countries as France and the United Kingdom chose not to advance their work on the development of missile defense systems. Neither have missile attack warning systems been created by France and the United Kingdom. China has acted the same way.)

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respect to the USA, if one keeps in mind the military sites on the territory of a number of countries in the western part of the Pacific Ocean).

With all the scientific and technical difficulties with which China is unavoidably faced in creating a missile defense system (since the Chinese defense industry and science and the Chinese military have no experience in this area), this method of developing the Chinese deterrence arsenal can be seen in Peking from the political viewpoint as preferable to simply building up a grouping of strategic nuclear forces—achieving ceilings of 200–300 nuclear warheads, although larger forces are not impossible.

The Chinese leadership is quite capable of considering that the creation of one version or another of a missile defense system by China in combination with a "moderate" build-up of strategic offensive weapons (equipped at the same time with various resources that ensure that they can break through any American missile defense systems in the foreseeable future, including a version of retaliatory actions by the Chinese strategic nuclear forces) will cause a less negative reaction in the international community, including India and Russia, than the abovementioned build-up of strategic nuclear forces.

In evaluating the Chinese motives for developing their own strategic nuclear weapons, it must be kept in mind that many of the political leaders (and top military commanders) in China are convinced that the strategic mission of the greater part of the American "national security establishment" is not to limit the external influence of China by the policy of "containment."[a] The strategic mission of the USA, in their opinion, is to "sever the line" to China becoming the "second superpower" by bringing about its collapse, as happened with the Soviet Union in 1991.

For at least two decades, American policy with respect to China has been characterized by a complex combination of a line of "involvement" of China in the world economy and

[a] One public manifestation of such a new accent in the policies of the USA with respect to China was the statement by US Secretary of Defense Donald Rumsfeld at the beginning of 2001, that China is not a

world politics and a course of "containment" of China (sometimes in extremely rigid forms). Many say that the initial intention of the "George W. Bush command" was to strengthen the "containment" component in American–Chinese relations. There was a strong urge to "stop China now, before it's too late." Among conservative Republicans it was noted that not only did the 1990s bring the US conditions of unprecedented, prolonged growth in the US economy (which allowed the USA to break away from the European Community and from Japan, regarded earlier as the chief competitors of the USA, including, potentially, in a military–political respect), but Republicans noted that at the same time China, having an even higher growth rate than the USA, substantially reduced its gap with America (the other Asian giant, India, was also able to do this, but not to such an extent as China). At the same time, these conservative Republicans did not fail to also note that China "remains a Communist power."

The perception of current United States policy with respect to the PRC, as aimed at the collapse and fragmentation of that country and the elimination of the "Communist regime" there, significantly "raises the stakes" in the standoff between China and the US, and the nuclear sphere is affected in the same way. In the presence of such a threat from the USA, not only for the Chinese leadership, but also for the many millions of civil servants in the state machine, the party, and the command staff of the National Liberation Army of the People's Republic of China, confrontation with the United States will be a fight not only for their political, but also their social–economic, and even their physical, survival. This could lead to a mobilization of resources for the purposes of defense, in a country that yields ever more economic might, of a sort that virtually no one in the USA can today anticipate.[a]

"strategic partner" for the United States but is a "rival." This statement was taken very seriously in Peking, even though it was not confirmed later by similar statements at the highest governmental level.

[a] The defense efforts in China have been on a much smaller scale than those in the USA. The military expenditures of the PRC are estimated to be at most about 60 billion dollars (including all secret budget items, as was for the Soviet Union), whereas the USA's military budget is about 5.5 times that sum. The

Moreover, such "high stakes" in conflict situations for the Chinese political and military élite (and to a great extent the business élite, since it is very closely associated with the political and military élites in modern China) may mean that China is prepared for higher degrees of escalation in the course of potential conflicts, all the way to the threat of using nuclear weapons.[a]

The steady process of forming a new foreign-policy strategy by the USA with respect to China (with a corresponding military, including nuclear, component) was to a certain extent disrupted by the events of September 11, 2001.[b] After that date, the focus of attention of the USA government leadership (as of the entire American élite) shifted to the problem of the "war on terror," in which China declared its support for the United States in this question with almost the same speed as the Russian Federation. China in this case undertook political–diplomatic efforts in support of the USA that were extremely important from a practical viewpoint, including some that were little known in Russia but met with strong approval highly among the US leadership.[c]

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technical equipment of the armed forces of the PRC lags behind not only that of the armed forces of the USA, but also that of the Russian Armed Forces by two and sometimes three generations, for many components.

[a] A number of American studies of the Chinese élite, systematically carried out over several decades, have in recent years paid ever greater attention not to the nature of the next generation of Chinese leaders from the ideological viewpoint (that is, "more pro-Western," "more liberal," "less devoted to Communist orthodoxy" etc.), but to its capability of providing effective management in international crisis situations, while defending Chinese national interests. This (and a number of other observations) suggests that the American "national security establishment" is again expressing ideas of "tests of strength" of the Chinese leaders in a series of stimulated crisis situations, in order to achieve from it at a certain moment significant concessions that would be perceived within the PRC as serious political setbacks.

[b] On the eve of these events, there were strong voices heard in Washington from those who considered it necessary for the United States to virtually "leave" Europe in a military sense for the sake of concentrating all resources on the solution of the problem of "restraining" China. The reaction of the American people to the monstrous acts of megaterror gave the George W. Bush administration an enormous emotional and political resource, which was transformed into a material resource that could be spent for military purposes. This is indicated above all by the immediate jump in defense spending by 48 billion dollars, which made it possible to solve new problems without giving up on the old ones.

[c] Among these actions of the PRC was the sending of a high-level delegation of the PRC to Pakistan with the purpose of persuading the Pakistani leadership to completely withdraw any support of the Taliban in

In the National Security Strategy of the United States of America, published in September 2002, China was not regarded as an opponent or "rival." It is said in this serious document that "we welcome the emergence of a strong, peaceful, and prosperous China." However, it is pointed out at the same time that "the democratic development of China is crucial to that future," and that after 25 years of reforms, "China's leaders have not yet made the next series of fundamental choices about the character of their state."[36] It can clearly be concluded from such caveats that, if China refuses to make the "fundamental choices" of taking the path of the development of democracy according to the Western model, the USA will not "welcome" the appearance of a "strong" China.

Many in China considered that the authors of this edition of the American National Security Strategy will, in fact, refuse to allow China the right to further strengthen its military power. These authors write that, by developing "advanced military capabilities," China is following an "outdated path," which does not correspond to the tasks of developing "national greatness." In their opinion, "in time, China will find that social and political freedom is the only source of that greatness."[37]

It is obvious that such an approach to the development of Chinese national might, and to the reinforcement of the military component therein, in the absence of any proposals for the limitation and restriction of the American military might confronting China (except for the reduction of the combat readiness of the strategic nuclear forces in accordance with the Russo–American agreement on strategic offensive potentials), could lead only to an increase in

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Afghanistan. This mission was successful (because of the long-time "special relations" between China and Pakistan, in part with the current Pakistani President Musharraf), and turned out to be an important factor in promoting the defeat of the Taliban at the first stage of the American operation in Afghanistan. China in this case acted quite deliberately, since the defeat of the Taliban was in its interests (taking into account that the Taliban has promoted the penetration of Islamic separatists of extremist persuasion into the Uygur Autonomous Region of Sinkiang in the PRC). Among other things, the Peking leadership tried to promote

American–Chinese antagonism. This antagonism, which is already at a fairly significant level, among other things because of the "variant readings" of the Taiwan problem that intensified after the George W. Bush administration came to power.

Thomas Donnely, deputy director of the "Project for the New American Century," in his work on reform of the armed forces, writes that, during the Cold War, the central front was Europe, where the WTO and NATO looked each other in the eye over the Fulda Gap on the German plain, but that "strategic rivalry" for the USA has now shifted to China. "It is taking place in East Asia, with the Taiwan Strait as the Fulda Gap of the present day," writes this author of "neoconservative" orientation.

This author writes that one of the main components of the reform of the nuclear forces of the USA today is to ensure the "possibility of carrying out combat operations and of achieving decisive victory..."[38]

Thus, it can quite clearly be concluded that, in the question of Taiwan, American figures of neoconservative persuasion will be quite prepared to proceed to nuclear conflicts, just as a number of American figures quite seriously considered in their time the possibility of using nuclear weapons in the case of combat operations in Central Europe, including in the region of the Fulda Gap.

As a whole, many signs indicate that the line of the USA on the "new edition" of the policy of containment with respect to China will continue and may even gain momentum. This policy will have an ever more pronounced nuclear dimension. The nuclear dimension will accordingly be maintained and developed in Peking's policy, too.

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As a whole, it can be predicted that the instability of the system of nuclear deterrence at a global level will increase in the next 7–10 years because of radical changes in the relation of the forces and in the character of the interaction in the Russia–China–USA "triangle." This

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such support of the USA in order to postpone political or military conflicts with the United States, of any

instability is reflected in the most direct way, in the vitally important interests of Russia's national security.

Being territorially and international–politically (geopolitically) a Eurasian state, Russia is very deeply interested in maintaining friendly, mutually favorable relations simultaneously with the USA and China. This task may involve serious complications if antagonism increases between the "monosuperpower" (the USA) and a potential "second superpower" (China). Russia in this case is free (by rationally depending on the enormous available experience in the policy of ensuring the strategic stability of the USSR and the RF) to exert substantial influence in ensuring that the relations between China and the USA do not deteriorate, in order that their "conflict potential" is not realized in sharp collisions, fraught with the threat of the use of nuclear weapons.

III. On the French analogy for the future role of Russia in the "global nuclear equation"

The Franco-American relations of the last four decades can be considered as an analogy in discussing the prospects for framing relations between Russia and the USA in the political–military sphere, which would unambiguously reduce the probability of nuclear conflicts to near zero.

The hypothetical suitability of this analogy is mainly determined by the fact that, from the viewpoint of Russia's development of a political and social–economic system, that country is moving toward the establishment of democracy and a market economy, which of course existed and exists in France (even in the time of President Charles de Gaulle, who was often accused of authoritarianism). The fact that France belongs to European (Euro-Atlantic) civilization was never in doubt, and the fundamental status of the Franco–American alliance is

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degree of gravity, as far as possible into the future, until China is fully ready for them.

not in doubt, despite the occasional appearance of difficulty, and sometimes even conflicts, in the interrelations between France and the USA.

For several decades, the United States has met with "respect" and "understanding" the fact that France has zones of special interest in North and Equatorial Africa.[a]

The American–French alliance relations took shape in the years of the Second World War, when the Soviet Union and the United States of America were allies in the coalition against Hitler. France played an active role in creating the North Atlantic Pact, which was conceived, among other things, as an organization for rigidly controlling the behavior of Germany.

At the end of the 1960s, France left the military organization of NATO, while remaining in this organization politically.[b]

France, having created its own nuclear forces (they were at first called "strike forces," and afterwards "deterrence forces"), ensured from the start that they were completely independent of the USA in both the scientific–industrial respect and in the operational–strategic respect.[c] France's nuclear forces became one of the main symbols of her tangible sovereignty and of the restoration of her role as a great power after the harrowing experiences of the Second World War and the collapse of the French colonial empire (especially after Algieria, which much of France considered an integral part of France, became independent).[39]

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[a] France is known for having a national consensus with respect to the maintenance and development of French culture (especially the French language), even outside the territory of France—mainly in those same countries of North and Equatorial Africa.

[b] When France left NATO, its headquarters were moved from Paris to Brussels, where they have been ever since. Virtually all the infrastructure of NATO was removed from the territory of France, which led to very significant costs for the USA and the other members of this bloc.

[c] Until the beginning of the 1970s, French nuclear energy was virtually completely independent of the USA. In the 1970s, French President Georges Pompidou entered into cooperation with private American companies in this area, in order to increase the efficiency of the French power-supply system.

The total independence of the French nuclear forces contrasts with the nuclear forces (and the corresponding policy) of Great Britain, in which, as part of her "special relationship" with the USA, there is full cooperation with the United States, especially in strategic nuclear missile carriers and submarine-launched ballistic missiles.[40] The degree of Great Britain's dependence on the USA in this area is so great that the question is regularly raised in the United Kingdom, of why does Great Britain need her own nuclear forces in this form at all, even though, because of extensive cooperation with the USA, their cost to the country is less than in France, by a factor of 2 to 3..

The French nuclear-weapons complex is characterized by an extremely high technological level (as are the French nuclear-energy and French civil scientific-research centers).

In 1967 the chief of the Supreme Staff of the French armed forces (General Staff "in wartime"), General C. Ayer, made the statement that French defense would henceforth extend "around all azimuths," which caused an extremely negative reaction in Washington and London. At the same time, such a policy most likely did not mean that the actual operational plans of the French General Staff called for nuclear forces to be aimed, for example, at the USA and Great Britain to the same extent as they were at the USSR and its allies.

The French theory of nuclear deterrence is characterized by a high level of development and originality. It always had features that distinguished it from the corresponding theories developed in the USA and the USSR (the RF). Two such prominent French theorists as L. Poirier and P.-M. Galois (leaders of the "purist" school) tried particularly hard to dissociate themselves from the dominant American approaches to nuclear deterrence. On one hand, they pointed out differences between the strategy of "deterrence" and the strategy of "defense," emphasizing that the latter assumed the direct use of military force if containment "does not

restrain the opponent in his aggressive actions." On the other hand, Poirier and Galois drew a distinction between the strategy of "deterrence" and the strategy of "intimidation" ("persuasion"), which also rests on the indirect use of military force to psychologically affect an opponent; however, the "purists" associated it with an aggressive, daring, foreign policy course. As Poirier wrote, in particular, "Deterrence is a form of the strategy of prohibition, intimidation—a form of the strategy of limitation and coercion."[41]

The French "White Paper on Questions of Defense" takes the following doctrinal positions concerning the role of nuclear weapons: "Nuclear deterrence is based on the fact that any aggressor, having decided to make an attack on our country, must expect to assume unacceptable risk, incommensurate in its scale with the possible results." Later in this document it is said: "The intensity of the harmful factors of nuclear weapons and the terror that they inspire, give the classical military concept of 'deterrence of the opponent' a radical meaning that it never had in the past. Therefore, the nuclear strategy of France is the strategy of deterrence, completely excluding confusion between deterrence and use."[42]

It is impossible to exclude the possibility that, because of the deteriorating political-military situation in the world, and under the influence of the corresponding doctrinal positions of the USA and the RF mentioned above, this position in France's nuclear policy may be reconsidered so as to reduce the "nuclear threshold."

The USSR always based their planning on the fact that the French strategic nuclear forces were aimed exclusively at several targets on the territory of the Soviet Union (especially medium-range ballistic missiles, eighteen of which were located on the Albion Plateau until 1998.)

In the words of Marshal of the Soviet Union N. V. Ogarkov (in conversations with the author), the General Staff of the Armed Forces of the USSR reasoned from the fact that the strategic nuclear forces of France were aimed mainly at Moscow and Leningrad as the most important targets of the Soviet Union.

According to Soviet estimates, they never possessed "counterforce potential," mainly because of the small numbers involved in the grouping of the strategic nuclear forces. More than once, when the author happened to discuss nuclear questions with representatives of our various departments, our side always suspected that France tacitly cooperated in the planning of targets in order to spread nuclear strikes over the territory of the USSR.

The French medium-range ballistic missiles, in comparison with American ICBMs, had a significantly shorter flight time to targets on the territory of the USSR, and this potentially created from a purely military–technical viewpoint the threat of a pre-emptive "decapitating" strike on the chief center of political and military–strategic control of the USSR—namely, Moscow. In this respect, the French medium-range ballistic missiles were similar to the American Pershing II missiles, which the USA intended to deploy (primarily on the territory of Western Germany) in the 1980s in response to the massive deployment of the Soviet Pioneer medium-range ballistic missiles (the SS-20). These plans of the USA (supported by the West German Chancellor, Helmut Schmidt) caused an extremely negative reaction in the USSR, where the Pershing II was called a "first-strike weapon." This was because it actually had a very short flight time (7–8 minutes), and the Soviet system for making (and implementing) decisions to use Soviet nuclear missile resources in response-counterstrike or counterstrike configurations would not have enough time to respond, as it assumed the approximately 30-minute flight time of the American ICBMs.

The very different response of the Soviet leadership to the threat from the French medium-range ballistic missiles mainly reflects the character of the political relations which has been in place since the 1960s (primarily because of the efforts of Charles de Gaulle and the Gaullists) between Moscow and Paris.

However, a no less important role was played by the fact that the French nuclear forces were significantly less than the American, and in comparison appeared to be a factor of minor significance, in a quantitative respect, in the nuclear standoff between the superpowers.

Moreover, the Soviet political leadership and top military commanders were concerned with the build-up of China's nuclear might, which had developed, primarily, resources that allowed that country to reach the territory of the USSR (as well as that of Japan, India, and the American military bases in the eastern part of the Pacific). This concern sometimes acquired a paranoid character.

The USA, particularly the Pentagon, from the time that France left the military organization of NATO and declared the doctrine of defense "around all azimuths," always maintained a high level of suspicion with respect to French nuclear policy.

The author more than once had occasion to hear complaints from responsible American individuals, that the French never gave unambiguous and convincing guarantees to the United States that their nuclear forces and facilities were not aimed at the USA and never would be aimed at them.

The 1990s saw a *de facto* return of France to the military organization of NATO, as was manifested among other things in the course of the peacekeeping operations in Bosnia and in the military activity of NATO in Yugoslavia (Kosovo) in 1999.

However, the French nuclear forces remain completely independent of both the USA and NATO, even though this costs the French taxpayer dearly. (This also is true of the French nuclear complex.[43])

With the elimination of the grouping of French medium-range ballistic missiles on the Albion Plateau, the French strategic nuclear forces became "two-component", having a marine component (nuclear submarines with underwater-launch ballistic missiles) and an aviation component, including carrier-based airplanes, so far on a single aircraft carrier, the *Charles de*

Gaulle (which many specialists have claimed to be highly ineffectual). The French strategic submarine missile carriers (four of them in total), unlike medium-range ballistic missiles, have intercontinental range and are capable (when sent to various regions of the oceans on combat patrol) of striking targets not only in the Russian Federation, but also in the USA, China, and virtually any country of the world.[44]

With the development of political–military integration within the framework of the European Union (and with the reduction of NATO's role in the eyes of the current US administration), the role of France's independent nuclear forces will quite possibly be subjected to a significant reconsideration. Much will depend in this case on the policy of other leading states of Western Europe, especially of Germany.[45]

* * *

The Franco–American analogy of relations in the nuclear sphere is extremely interesting when discussing the question of constructing new relations between Russia and the USA. This is mainly because Russia is transforming itself into a country with a modern market economy and political democracy, with standards for ensuring human rights that obtain in the countries of the Euro-Atlantic community, to which both France and the USA belonged and still belong.

For a long time France was almost the only country within the Euro-Atlantic community that had secured the state of actual sovereignty for which Russia strives today, attempting at the same time to "return to Europe" after the more than seventy years of separation caused by the October Revolution of 1917.

However, the Franco–American analogy can be applied only with very substantial caveats and restrictions. These are mainly associated with the geographical (geopolitical) position of Russia, which has important security interests on an enormous Eurasian territory

and in many of the waters of the world's oceans where France's interests are today expressed to a significantly lesser extent.

Russia's nuclear arsenal has a radically different character than France's arsenal. Most importantly, the former exceeds the latter by two orders of magnitude.

For a long time, in the entire foreseeable future, Russia from the viewpoint of her security interests cannot allow herself to reduce her strategic nuclear arsenal to a size analogous to that of France, even though the Russian nuclear potential will be reduced to an ever greater degree for the natural economic and technological reasons indicated above.

The geographical and political position of Russia makes it impossible for our country to carry out a nuclear policy analogous to that of France, which is largely determined by the fact that France for a long time was, as it were, in the shade of the USSR–USA (RF–USA) "system of central nuclear deterrence"

IV. Potential wars between new members of the "nuclear club"

Two official new members of the "nuclear club" since 1998 are India and Pakistan, which have had almost permanently strained relations ever since they acquired independence (by leaving the British Empire), with a constant threat that the situation will deteriorate into a "major war."

The Cargill incident of 1999 convincingly showed the unsoundness of the theoretical (more precisely, hypothetical) constructions by those figures who believe that possession of nuclear weapons by two antagonists increases their deterrence against the use of military force even on the remote approaches to the "nuclear threshold."[46]

In 2001 and during the first half of 2002, India and Pakistan several times came very dangerously close to the "nuclear threshold."[47] The strongest push in this direction was the

terrorist act against the Indian parliament in December 2001. This occurred despite the fact that both countries at that time were participating in the same antiterrorist coalition, headed by the United States.

An exchange of nuclear strikes between India and Pakistan not only could directly cause the death of tens of millions of people in South Asia, which in itself would be the heaviest, deepest trauma for all of humanity, including our country. It would also very likely produce a great deal of radioactive fallout on the territories of Russia and other states in post-Soviet space, with the most serious consequences for the health of our people, the ecology, and agriculture.

In estimating the possible ecological–climatic consequences of the use of nuclear weapons by India and Pakistan against each other, one should proceed from the fact that, as pointed out by the prominent Russian specialist on this problem, A. S. Ginzburg, they will significantly differ from the large-scale atmospheric changes and the subsequent ecological catastrophes studied, among other phenomena, in the 1980s, as components of "nuclear winter." These differences are caused by the mountainous terrain, the subtropical climate, and the high population density in the region where nuclear weapons may be used by both sides. Both sides in this case have as yet a comparatively small (by comparison with the USSR and the USA, or the RF and the USA) total yield of nuclear warheads (according to Ginzburg's estimate, about one megaton TNT equivalent). Despite the specifics of the situation in this region, as this author concludes, "it can be assumed with confidence that the local and regional meteorological and ecological effects could affect the life of the population and the demographic situation in the region significantly more strongly than the direct destruction from the nuclear explosions."[48]

Because of this, the efforts that were made by Russian President Vladimir Putin at Alma–Ata in June of 2002 at a summit with the leaders of India and Pakistan were completely justified by the degree of severity of the Indo–Pakistani conflict. Despite the opinion of many skeptics in our country and abroad, these efforts produced results—in any case, no less than the

diplomatic efforts of the USA on the Palestine–Israeli conflict. (Unfortunately, this activity by the Russian president was downplayed in the Western media: all the words on "sending the conflicting sides to neutral corners" in the summer of 2002 related to the efforts of the USA and the United Kingdom.)

The behavior of these two Asiatic countries, who became the possessors of nuclear weapons only four years ago, clearly showed that they lacked the requisite historical experience, optimized mechanisms and "rules of behavior" given an increase of tension capable of leading to the use of nuclear weapons. Many specialists express well-based doubts about whether the Indian and Pakistani nuclear forces possess the technical resources and procedures of rigidly centralized control over the nuclear munitions and delivery equipment, that are possessed by the "old nuclear powers," and above all by the USA and the Russian Federation.[a] Much of the latest data indicates that the nuclear forces in both powers of the "second nuclear age," by comparison with the strategic nuclear forces of the USA, Russia, Britain and France, are extremely vulnerable to pre-emptive strikes, and this in turn can induce the governmental leaders and military commanders of these countries to use nuclear weapons first, in a pre-emptive strike, if only from fear of losing the weapons obtained via superhuman efforts by the far-from-rich nation.

In their nuclear interaction, India and Pakistan are now in a state similar to that occupied in the 1950s by the USSR and the USA, when the vulnerability of the nuclear forces and equipment of both sides was regarded as a motivating force for a pre-emptive strike (one of the first to direct attention to this at the time was the American scientist Albert Wohlstetter, who laid several cornerstones in the theory of nuclear deterrence).[49]

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[a] The author can testify that optimized procedures for controlling nuclear forces and equipment, optimally combining "positive" and "negative" control, have no less significance than the technical equipment proper.

An analysis of several of the parameters that characterize the groupings of the multipurpose forces of India and Pakistan, involved in a standoff against each other, indicates that the state of affairs at the "prenuclear level" leaves much to be desired from the viewpoint of overall strategic stability. Both sides are continuing to build up classical offensive weapons (tank units and formations, strike aircraft, missile weapons in non-nuclear equipment for the entire depth of strategic troop structuring, etc.). The troop configuration of both sides has deteriorated since December 2001, from the viewpoint of ensuring strategic stability at the level of multipurpose forces, because powerful contingents have been moved close to the potential line of combat engagement.[a] Moreover, the countries concerned virtually ignored the experience and efforts of the USSR and the countries of the West in 1970–80 (mentioned above) aimed at increasing strategic stability at the level of multipurpose forces in Central Europe, where the two most powerful groupings of land forces and aircraft, of the Warsaw Pact and NATO, confronted each other.[50] A comparative analysis of what took place in that region in the 1970s and 1980s, and what is occurring today in the opposition of India and Pakistan, suggests that much of what was developed as a model for increasing the stability of equilibrium at the non-nuclear level (and something did actually begin to be accomplished in the second half of the 1980s) remains of value under modern conditions (the forms of "non-offensive defense" and "counteroffensive defense").

The joint efforts of Russia and the USA could assist India and Pakistan to assimilate the Russo–American (Soviet–American) experience of assuring strategic stability at both the nuclear and the non-nuclear level as early as possible. The degree of restraint of India and Pakistan in developing their nuclear forces and facilities will largely depend in a quantitative respect on how the nuclear policy of China and the USA takes shape.

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[a] In October of 2002, after elections were held in Kashmir, the Indian deployment of multipurpose forces

It can be predicted with a high degree of probability that India, in any case, will create its own nuclear intercontinental-range weapons, if only to avoid being inferior to China as an "intercontinental nuclear power."[a] If China accomplishes a sharp build-up of its own strategic nuclear resources, India will be all the more prepared to follow this path. However, India's nuclear forces and facilities, intended for conflict with Pakistan, will of course continue to be developed in this case.

V. Future "nuclear configurations" and global stability

Iran, Russia's southern neighbor—a country with an ancient culture and civilization, possessing great potential development—will very likely become a possessor of nuclear weapons within the current decade.[51] Russia is connected with Iran by long-standing neighborly relations (although these relations have more than once have undergone difficulties, and have even reached a state of crisis, sometimes with no external interference by the Western powers). However, there are spheres of conflict in this case, associated above all with the question of the rights of various states on the Caspian Sea.[52]

Iran plays an extremely significant role in the Organization of Petroleum-Exporting Countries (OPEC), which has regained its position as an extremely influential coalition in the past 3–4 years, not only in the world economy, but also in respect of international politics, due to the special significance that oil, oil prices and conditions of supply, have held for at least half-century (Iran has 9.4% of the world's explored oil reserves—significantly more than the share of all the countries of the former Soviet Union, which is about 6%.)[53]

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along the Indo–Pakistani border began to be reduced.

[a] There is much that suggests that the real level of political and military antagonism between India and China is significantly less than many in both Russia and the West think (especially after the statements by Indian Defense Minister Fernandes after the nuclear tests in India in 1998, when he publicly demarcated the anti-Chinese vector of Indian nuclear policy).

The revival of OPEC's role (which was achieved by allotting the production of petroleum by its members higher prices on crude petroleum than that sought by the USA and a number of other countries who are net importers of petroleum) took place at the end of the 1990s, with the active participation of Iran. It largely resulted from the appearance of a new formula for interaction in the OPEC "triangle," Venezuela–Iran–Arab states of the Persian Gulf (mainly Saudi Arabia and the United Arab Emirates).

OPEC was largely outside the influence of the USA, which was transformed into a "monosuperpower" after the break-up of the USSR, despite the immense predominance of American military, financial, and overall economic might over all other "power centers" of world politics, and despite the increasing (especially after the 1990 war, won by a coalition headed by the USA) American military and intelligence presence in the Persian Gulf—the most important petroleum region of the world—and the growing possibilities for the policies of the United States in Latin America after the Soviet Union collapsed and the Russian Federation politically, to a great extent, "evacuated" from that continent.

The restoration of OPEC's power after an extended period, during which this organization played an insignificant role, has had the effect that the results of the US victory in the Persian Gulf War in 1990 have largely been compensated for, from the viewpoint of America's control over the state of the world fuel market.[a]

The restoration of OPEC's role was "overlooked" in Washington for several reasons, among which the most important was the unprecedented, prolonged growth of the American

[a] Appeals to Russia to form a "gas OPEC" on an Iranian–Russian basis were heard from a number of official representatives of Iran in 2001–2. (See, for example, the interview of Iranian Ambassador to Russia Mehdi Safari, in the newspaper *Kommersant*: "We are now creating a gas OPEC." *Kommersant* no. 100, June 9, 2001. Such a prospect seems extremely doubtful to most Russian experts in this field.

economy (beginning in the early 1990s) under conditions of significantly lower prices for petroleum than began to appear at the end of the 1990s and the beginning of this new decade.

Under the new conditions, the attitude toward this question is beginning to change radically, not only because of the substantially worsening economic situation in the USA itself and in other highly developed countries, but also under the influence of the new military–political situation, which, among other things, was (and is) strongly affected by the "megaterror" acts of September 11, 2001.

The question of control over the main sources of energy resources (above all petroleum) and the guarantee of reliable and uninterrupted supplies of petroleum at "just prices" has again become one of the central questions in the foreign and military policy of the USA. The significance of the "petroleum factor" has again become so great from a military–political viewpoint that it is capable, if some or other acute conflict situations appear, of setting off mechanisms which involve the use of nuclear weapons.[54]

As a whole, the question of the attitude to Iran's role in the system of international relations of the first quarter of the twenty-first century, including that country's role in the new nuclear configurations, must therefore take into account the entire context of "energy geopolitics," in which the USA attempts to secure for itself the leading role, but where Russia also possesses great possibilities, both because of her energy potential and her geopolitical position.[a]

No experts have any doubt that Iran has created within the last 10–12 years the technical basis for creating missiles for both civilian and military purposes.

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[a] However, Russia's national strategy in this most important area has only now begun to form. The substantial differences in the policies of the leading (private) oil companies of the country, including policies with respect to OPEC (of which Russia, as is well known, is not a member) hinder the development of such a strategy. The most infamous of these differences are the disagreements between the two oil giants—YUKOS and Lukoil—which inevitably affect government policy, since the role of large companies in determining government policy is very great in Russia, greater than in the USA or in any other developed country.

Many experts have long since noted, with good reason, that the series of tests of medium-range missiles carried out by Iran make sense in terms of military strategy only if these missiles are fitted with warheads equipped with weapons of mass destruction, especially nuclear munitions.

It does not make sense to equip ballistic missiles of such a class with conventional munitions—the ratio between the cost of the target hit and the cost of the missile itself would be very low. The presence of such rockets in the fighting complement would have no effect in a political context if they were not nuclear-armed, and would add little to the status of the state. But the status feature, as must once more be emphasized, is in many cases almost decisive for any country acquiring nuclear weapons and the equipment for delivering them.[55]

It can be assumed that the inclusion of Iran in the "axis of evil" by the George W. Bush administration at the beginning of 2000 impelled the Iranian leaders to speed up work to create nuclear munitions and to complete ballistic missiles as a means of delivery. Iran's actions in this direction can be formulated to a still greater extent by the military actions of the USA against Iraq, directed toward the overthrow of the cruel dictator, Saddam Hussein.

It must be kept in mind that the efforts of Iran in the nuclear sphere have almost as long a history as those of India and Pakistan. The Shah of Iran, Mohammad Reza Pahlavi, made the decision in the 1970s to develop nuclear energy in his country. Hundreds of Iranian specialists then underwent training in the best Western colleges and universities, including American schools, since Shah-led Iran was at that time almost the chief ally of the USA in the Persian Gulf. (The appearance of nuclear weapons in the Democratic People's Republic of Korea should be regarded as less probable, although, from the viewpoint of the supreme interests of Russia's security in this region, such a probability requires the closest attention to this problem and special efforts, which will be discussed below.[56])

The acquisition by Iran of nuclear weapons would lead, instead of the nuclear China–India–Pakistan "triangle," to the China–India–Pakistan–Iran "rectangle", and very likely the much more complex configurations of a "pentagon" (China–India–Pakistan–Iran–Russia) or even a "hexagon" (China–India–Pakistan–Iran–Israel–Russia). No system of interactions for control has been constructed—not even theoretical ideas of how this could be done—in the interests of avoiding mutually annihilating nuclear conflicts in such complex configurations. Without the appropriate intellectual, political, and defense efforts, the prevention of nuclear conflict will be a matter of luck.

It is obvious that the experience of constructing a "dyad" system of mutual nuclear deterrence for the USSR–USA, which is applicable to the India–Pakistan interaction to some extent, will have little value for the interactions between the vertices of a pentagon or a hexagon.

The "equalization" of the USSR–USA–China nuclear "triangle" in the 1960s, through to the 1980s, cannot serve as an analogy, because China's nuclear arsenal was frankly much smaller than the nuclear forces and facilities of the two superpowers. China, having, as mentioned above, only a few warheads on intercontinental ballistic missiles (plus 150 or 200 nuclear warheads on medium- and short-range vehicles, capable of destroying targets on the territory of the USSR and American military targets in the Asiatic–Pacific region) possessed several possibilities for the deterrence of the USA and the USSR (possessing the capability of inflicting "unacceptable damage" in a retaliatory strike); however, on the whole it was, as it were, in the shadow of the United States–Soviet Union "dyad" system of deterrence.

The "equalization" of relations, for example, in the Russia–China–India–Pakistan–Iran–Israel hexagon cannot be reduced to the sum of the relations in the "dyads" that make up this hexagon.

Without an active and very purposeful policy on this most important question of our national security, as a minimum, Russia will be found to be the hostage of the daring, emotional,

paranoid, or simply irresponsible behavior of one side or the other in the rectangle, pentagon, or hexagon.

There is much that indicates that the Russian "political class" and military commanders do not yet adequately appreciate the threat of such a development of events in the immediate vicinity of Russian borders.[57]

The appearance in Iran, of its own nuclear weapons, could force a deterioration of relations directly between Russia and Iran, as occurred in the relations between the USSR and China after the latter acquired nuclear status. RF–Iran relations can become strained with regard to the Caspian Sea problem, which possesses significant conflict potential. Among other things, the acquisition by Iran of its own nuclear weapons is capable of compensating for (at least in a political/psychological respect, which in many cases is decisive) the build-up of Russia's military might in this region (the North Caucasus Military District and the Caspian Fleet) at the end of the 1990s and the beginning of this decade.

It should therefore be stated that the appearance of nuclear weapons in Iran could mean a direct threat to Russia's national security interests (including the fact that the Shehab-3 missile, tested by Iran already, has an attack radius that makes it possible to reach many of the cities of Russia).[a]

This threat cannot be parried only by purely military measures on the part of Russia and our allies and partners in this region. The most desirable solution (which is still possible, considering past historical experience) would be to achieve a situation, in which Iran would give up acquiring its own nuclear weapons, and would completely convert development in the area of missile resources into the non-military use of the developed vehicles. However, Russia's efforts alone will clearly be

[a] The overwhelming majority of Western experts say that Iran will not have its own ICBMs, capable of being delivered to US territory, until 2015–17. This once more confirms that Iran's nuclear missile weaponry could pose a threat to Russia significantly earlier than to the USA.

insufficient for this. This problem requires serious, institutionalized cooperation between several centers of power—Russia, the USA, China, and the European Union.

Among other things, Iran must obtain guarantees of security that would "cover" to a maximum extent its need to create its own nuclear forces of deterrence from a political–military viewpoint.

Many opportunities for the creation of such cooperation have been missed in preceding years, in some cases because of an inadequately far-sighted position on the part of the USA, which often boiled down to accusations aimed at Russia relative to various leaks to Iran of nuclear and missile technologies. However, the possibilities for serious Russian–American cooperation still remain, and the creation by Iran, of its own missile and nuclear weaponry, should not be thought of as something absolutely inevitable or predestined.

Purposeful efforts on the part of Russia and the USA, as well as other permanent members of the UN Security Council, could prevent the complication of the entire "strategic configuration" in the region, and the world as a whole, due to the appearance in Iran of its own nuclear missile weaponry.

VI. Nuclear weapons and "megaterror"

The **messianic** political alignment of the terrorist organization that carried out "megaterror" acts in the USA gave the leadership of the American government and the business community of the United States reason to believe that the USA is threatened by the use of weapons of mass destruction, including nuclear munitions, by terrorists.[58] It must be recognized that there are a number of important justifications for such assumptions.

Even the megaterror act of September 11, 2001, itself, which took several thousands lives, of Americans and of citizens of many other countries, approached in scale potential terrorist acts using

weapons of mass of destruction. The threat of the use of weapons of mass of destruction on the part of radical terrorist organizations led to the appearance in the USA of refined doctrinal positions that envisage the use of nuclear weapons in a pre-emptive strike.[59] This was ultimately reflected in George W. Bush's National Security Strategy of the United States of America, published in September 2002, a year after the megaterror acts against the USA.[60]

The question of where terrorist organizations could obtain weapons of mass destruction remains extremely ambiguous. American official presentations primarily point to the non-democratic countries included in the "axis of evil" (the "first wave" in 2002 included Iraq, North Korea, and Iran, while the "second wave" included Syria, Libya, and Cuba; Cuba later virtually stopped appearing as such[61]).

That any state would voluntarily and deliberately transfer nuclear munitions into the hands of nongovernmental terrorist organizations without the presence of an extraordinary situation is very, very doubtful. All the experience of the post-war decades indicates that, for a state, for specific governmental leaders, or for political élites, nuclear weapons are above all a symbol of the status of the state, ensuring its prestige and its actual sovereignty, and not just specific equipment that abruptly increases the combat capabilities of the military forces. As indicated earlier in this work, this was true for the USSR, China, India and Pakistan. This was clearly expressed in the policies of France in the 1950s and 60s. Status considerations were intrinsic to a lesser degree for the creators of Israel's nuclear weapons, who adhered to the concept of "bombs in the basement." (In the course of a discussion of the nuclear question begun in the Knesset in 2001–2, signs appeared of the abandonment of this concept, but they later virtually disappeared.)

It seems far more realistic that radical political forces using terrorism as weapon in their struggle (which is a more correct description than simply "terrorists") might obtain nuclear munitions as the result of a sudden destabilization of the domestic political situation in one country

or other, or by destroying its system of strategic control, including the special system for controlling nuclear munitions.

This sort of fear was widespread in the USA in 1991–2 with respect to the nuclear arsenals of the collapsed Soviet Union, especially regarding Soviet tactical and operational–tactical nuclear weapons. These fears, among other things, were associated with the fact that the West apparently did not have sufficient knowledge of the urgent and very effective measures for removing all non-strategic nuclear weapons to the territory of the RSFSR from the territory of the other republics of the USSR at the end of 1991; the author of this article, among others, participated in the resolution of this problem.

More recently, fears of this sort are most often expressed with respect to Pakistan.

At the same time, the transfer of nuclear weapons and delivery facilities into the hands of a terrorist organization by one state or other cannot be completely ruled out. Such a decision can be associated with at least two circumstances: (a) when an extraordinary situation arises for the leadership of a state that possesses nuclear weapons; (b) when there is the closest interaction between a radical nongovernmental organization prepared to use nuclear weapons, and the governmental organs of power of a state that possesses nuclear weapons; moreover, the force and influence of this organization must be at least commensurate with the force and influence of the governmental machinery of the country that possesses the nuclear weapons.

A country that possesses nuclear weapons can regard the threat of the infliction of strikes against its nuclear installations by external forces as such an extraordinary situation. When such a threat is perceived as reality, it can be assumed that the possessor of nuclear weapons, fearing to lose them, may decided to "disperse" them by transferring them into the

hands of terrorists prepared to use them on the territory of the state that is prepared, in the opinion of the threatened state, to make pre-emptive strikes against such nuclear installations.[a]

Considering the second circumstance, it can be pointed out that numerous precedents can be found in history, in which there was the closest entanglement of secret terrorist organizations and official governmental organs.

Such was the case, for example, in Serbia on the eve of the First World War. The terrorist act of the student Gavrilo Princip against the Austro–Hungarian Archduke Francis Ferdinand in 1914, which triggered the First World War, was the result of the activity of radical organizations using terrorist methods in their struggle[62] *who had deep roots in the Serbian General Staff.*[63]

Pakistani President Musharraf, who entered the antiterrorist coalition headed by the USA in 2001, needed to carry out a large-scale cleaning of the upper echelons of his special services, who were closely associated with the Taliban and, through the latter, with Al-Qaeda. As a result, as was noted in the Western press, the danger of nuclear munitions falling into the hands of radical terrorist organizations was radically reduced. However, a number of American experts doubt the genuineness and effectiveness of the cleaning carried out in Pakistan.[64]

If it is assumed, for example, that Iraq has nuclear weapons, the most logical step on the eve of military actions by the USA against Iraq, would be to "disperse" them (or other weapons of mass destruction), in part, by placing them on the territory of the United States (or of an ally of this government) as the final means of deterring the USA from beginning a war against Iraq.

It should be kept in mind in this case that such an operation would be a limited war for the USA whereas, for Saddam Hussein (since the goal of such an operation declared by the

[a] A series of studies carried out in the USA after the events of September 11, 2001 showed that the likelihood of the delivery of nuclear weapons (or of a "dirty bomb," meaning a radioactive or bacteriological weapon) remains very, very high, despite all the immense measures to assure the internal security of the USA. The "internal security" system remains incomplete, with an enormous number of gaps.

American leaders is the liquidation of his regime), it would be total war, with the use of all forms of combat armaments available to him.

The former deputy defense secretary of the USA, Harvard Professor G. Allison, writes that in the course of the first "Gulf War" the Iraqi armed forces were already prepared to launch Scud missiles and other vehicles carrying chemical and bacteriological armaments capable of striking American bases in Saudi Arabia, as well as Israel. However, the USA deterred Hussein from using these weapons by threatening him in retaliation with "unlimited retribution" (implying the use of, in part, nuclear weapons), which would annihilate his regime. But now, having declared that the task of the military campaign is to eliminate Hussein and his regime, how is it possible to exclude the possibility that he might behave like the biblical Samson (who brought down the temple on himself and on his enemies—A. K.).[65]

The probability that radical political organizations with messianic aims will use nuclear weapons in their terrorist acts has recently increased, among other things because of the sharp outburst of anti-Americanism in the Islamic world, that was observed after the antiterrorist operation in Afghanistan was begun by the United States and its allies, and as a result of the aggravation of the Palestine–Israel conflict.[a]

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Having created a threat to use nuclear weapons against terrorists and the forces supporting them, the current American administration formulated a whole series of fundamentally new positions not only involving military doctrine, but also international law, and affecting the "cornerstones" of modern international law in war and peace.

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[a] It has been asserted in the Arab world that the current American administration, having initially attempted to distance itself from this conflict, later unambiguously occupied a position that supports the hard line of the government of Ariel Sharon with respect to the Palestinians and their leader, Yasser Arafat. This viewpoint remains the prevailing one, even though the current American administration distinctly and unambiguously (unlike their predecessors) voiced support for the creation of an independent Palestinian state, which is traditionally perceived negatively by a significant part of the Jewish community in the USA.

In fact, a right has been defined, to inflict preventive strikes (including with the use of nuclear weapons) in any region of the world, above all on territories that are preparing for terrorist acts with the use of weapons of mass destruction. This means a radically different approach to the definition of aggression and to the right to self-defense, than is defined today in the corresponding UN documents (and in this connection, voices are more and more often heard from the USA, requiring the reconsideration of the corresponding acts in international law). An obvious hint in this regard is contained in George W. Bush's National Security Strategy of 2002.

From a purely operational–strategic viewpoint, the determination of the target of a preventive strike using nuclear munitions presents a problem of enormous complexity, and the highest degree of indeterminacy.[66] Any governmental leaders must be fully informed of this.

The events of September 11, 2001 and the entire series of subsequent episodes of the "war on terror" declared by President Bush showed that the new threats to the security of the most powerful country in the world are not adequately met by the resources and methods for obtaining intelligence, and that there are weaknesses in the mechanisms of the separate intelligence services and in the entire system of their interaction and coordination, but chiefly in how the intelligence organs and governmental leaders interact when making political and military decisions in the sphere of national security. The operations in Afghanistan, judging from the information appearing in print, are carried out with an "enormous deficit of intelligence data," and this directly affects the quality of the targeting. (As a result of this, several thousand completely innocent Afghans have already died, repeating the tragic history of the Soviet war in this unfortunate country.)

In principle, it would be at best rash to rely only on intelligence data when making the most responsible political and military–strategy decisions concerning the use of nuclear

munitions against "terrorist installations" (or against installations from which weapons of mass destruction can be transferred to terrorists) on the territory of some sovereign state, considering the current standard of work by the intelligence services. Many Western experts and politicians believe that the quality of the activity of the American special services can be expected to radically improve only in the medium-term, and only given the most favorable circumstances.[a] The gigantic inertia of the Cold War (both in the military and military–industrial machine) is still present in many special services of the world, and this weakens their capabilities in the struggle with terrorists.[b]

It should also be kept in mind that Al-Qaeda and other radical organizations are able to skillfully utilize the modern "information environment," including the Internet and methods of disinformation and psychological war, pointing their opponents at false targets.[67] These methods are quite capable of being used to orient the USA and its allies toward false targets for preventive strikes with the use of nuclear weapons.

It is just as difficult to determine targets for inflicting retaliatory nuclear strikes after new acts of "megaterror," even if the intelligence data concerning all possible targets for such purposes are complete. The determination of the strike target in this case fundamentally differs from nuclear planning in the USSR, the USA, and other nuclear powers with respect to each other and states allied with the other side. Then, a state's own people, including the relatives and loved ones of the government leaders who decided to use nuclear weapons first, ultimately

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[a] The French special services, for example, look more convincing here, since for several decades they have specialized mainly in the struggle with extremists of various factions, including Islamic extremists. In particular, the French special services were able to thwart an act of megaterror in the mid 1990s, with respect to the Eiffel Tower in Paris, similar to what occurred in the USA on September 11, 2001.

[b] Even before the megaterror acts of September 11, 2001, authoritative American experts pointed out that, first, the special services largely continued to follow the stereotypes of the Cold War; second, the increase of their number in the USA caused a very acute problem in coordinating their activity; third, after enormous volumes of varied intelligence data are obtained, the analysis of these data substantially falls behind the requirements of the organs that make political and military decisions. See, for example, R. J. Hermann,

become hostages of the actions of these same government leaders (since even for purely technical reasons, it is impossible to hide them all in a bunker ahead of time). Retaliatory strikes were planned to include a carefully determined set of military and nonmilitary targets, industrial installations, energy and transport facilities and, finally, urban agglomerations. (A precedent for this was created by the bombings by the Nazi Luftwaffe of London, and later the mass strikes by British and American bombers against Hamburg, Dresden, Cologne, Magdeburg, and other large German cities, as well as the delivery, in 1945, of three nuclear munitions by US bombers on Hiroshima and Nagasaki. The USSR also attempted to carry out strategic bombings of Berlin in 1941, but they were soon halted because of insufficient long-range heavy bombers and the loss of the necessary airstrips as a result of the rapid attack by the Wehrmacht.)

It is worth repeating that it is far more difficult under modern conditions to seek such obvious targets for retaliatory strikes after they are used by radical terrorist organizations, and, in fact, can even be impossible. Besides the high degree of indeterminacy in choosing targets from a political viewpoint, and from the viewpoint of sufficiency of intelligence data, a significant degree of indeterminacy is intrinsic to the very mechanism of carrying out nuclear operations. These are characterized by error and malfunctions in control, to an even greater extent than are operations involving the use of conventional arms (both due to the human and the technical components).[68]

Proponents of the use of nuclear munitions for the purposes of a struggle against terrorist organizations believe that their use, since it will be single, and not massive, can be significantly better controlled than would be the case, for example, under the conditions of a war between the USSR and the USA, or the WTO and NATO. The emphasis in this case is concentrated on super-low-yield nuclear munitions (mini-nukes), which could be used against

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"Keeping the Edge in Intelligence," in *Keeping the Edge. Managing Defense for the Future,* ed. A. B. Carter and J. P.

highly protected terrorist installations with almost none of the side effects that characterize the use of nuclear weapons as a whole.[69]

In 1994, the US Congress prohibited allocating R & D resources for the development of nuclear munitions of power less than 5 kilotons, in order not to erase the boundary between nuclear and conventional weapons, and in order not to accordingly increase the probability of the use of nuclear weapons.[70] However, as early as the end of the 1990s, pressure increased in the USA in favor of repudiating such limitations, with ever more arguments appearing in favor of such weapons. Information appeared in the press in October of 2002 that the US Congress had "deblocked" the 1994 bans mentioned above.

As noted, for example, by one of the managers of Livermore Laboratory, a prominent American physicist, Stephen Younger, who is responsible for the development of nuclear weapons (and who in 2001 occupied the post of director of the Defense Threat Reduction Agency of the US Defense Department), low-yield nuclear munitions, besides reducing side effects, have the advantage that they can be maintained in a battle-ready state with a greater degree of reliability and at significantly less cost than the nuclear munitions of the current nuclear arsenal of the USA.[71]

The authors of the Pentagon's Nuclear Policy Review, which appeared in January 2002, are unambiguously in favor of the development of such munitions. The authors of this document tried to argue (including in conversations with the author of this article) that this does not mean a reduction of the "nuclear threshold" as a whole, including in Russo–American or Sino–American military–political mutual relations, but only as applied to countries on the "axis of evil" and radical nongovernmental organizations that advocate the use of megaterror. This argument is with good reason doubted by many prominent experts and politicians in the USA and Western Europe. These doubts have a valid basis, since it is very hard under modern

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White (Cambridge: The MIT Press, 2001), 105–111.

conditions of globalization and the contraction of the entire "strategic space," to draw a distinct boundary between "nuclear thresholds" for different groups of "dramatis personae" in the system of international relations and different situations.

At the same time, such a threat of the use of "mini-nukes" can in some cases actually be an instrument of deterrence. However, the use of such an instrument requires an extremely high level of strategic control from the side that uses such a threat and the presence of deep mutual understanding with a number of the other leading subjects of international relations, above all mutual understanding between the USA and the Russian Federation, and between all the permanent members of the UN Security Council.

Evaluating the prospects of the appearance (and use) of "mini-nukes," it must also be kept in mind that there is a continuing, rapid development of high-accuracy and powerful conventional munitions that approach low-yield nuclear munitions in their destructive capability (which attracted the attention of such prominent military figures in the USSR as N. V. Ogarkov, V. M. Shabanov, and V. P. Mironov even at the end of the 1970s and the beginning of the 1980s).

VII. Conclusion

The four groups of interrelations mentioned above, between the subjects of international relations, allow the author to unambiguously conclude that it is impossible to exclude the use of nuclear weapons by conflicting sides in the next few years, both single use and the use of tens of nuclear warheads.

The current probability of the use of nuclear weapons remains lower than it was in the years of the Cold War, in the 1950s and 60s, but it is clearly increasing. There is much that justifies observations that this threat appears significantly more real today than it was not only

in the 1990s, but also in the 1970s, and even in the first half of the 1980s, when a definite recurrence of the Cold War, including in its nuclear dimension, was observed.

This is all occurring under the conditions of a clear increase of the overall strategic indeterminacy in the system of international relations, simultaneously in a military–political and in an economic respect (with an obvious deterioration of the economic situation in the current decade, by comparison with the 1990s[72]).

Indications of the probability of new nuclear conflicts are simultaneously showing up in the political sphere, in operational–strategic thinking and planning, in the sphere of international law, and in the development of means of armed attack. A shift in psychology relative to the use of nuclear weapons, both among the élite and among the masses, can be observed in a number of countries, above all in the "monosuperpower"—the USA.

Under the action of a complex combination of factors and circumstances, a "taboo" has, before our very eyes, once again ceased to exist in the public consciousness of the USA and of many other countries. The assessments of scientists (above all, American and Soviet, as well as Swedish, scientists) in works that appeared in the 1980s on the ecological and medical/biological consequences of nuclear war have been half-forgotten by both élite and mass opinion, despite the extremely strong effect they had at the time.[73]

There is no adequate response in the international community today, for the prevention of nuclear conflicts. Many components of that system of international security (and of the assurance of strategic stability) are no longer active today, or have even virtually ceased to exist. There is still no "design" for a new system. Increasing international military–political instability and strategic indeterminacy requires varied, including nontrivial, political, diplomatic, and technological methods for solving these problems from all the main subjects of international relations (to which group Russia undoubtedly belongs).

The development of cooperation between Russia and the USA, not only in the sphere of the nonproliferation of nuclear weapons but also in the non-allowance of their use, has fundamental significance. This mechanism has clearly not yet been perfected. Indeed, for the problem of non-proliferation, the cooperation between Russia and the USA could be larger in scale, and more thorough. Initiatory political actions are necessary, directed toward preventing the appearance of new nuclear states, since this would destroy the stability and controllability of international relations in the nuclear dimension.

In this respect, there would be special significance in combined political efforts by Russia and the USA to prevent the appearance of new nuclear states, including, above all, Iran and North Korea. It is necessary to involve other leading subjects of international relations—above all China, India, and the European Union—in these efforts.

Since it is one of the most important partners of the USA in the battle against the proliferation of weapons of mass destruction, and with radical organizations advocating terrorism, Russia, for the sake of her own vital interests and the interests of international security as a whole, cannot take the position of a "junior partner" who agrees in everything with the "senior partner" (just because Russia is now much weaker than the USA), as suggested by certain figures in Washington and even in our own country. Such a position is counterproductive in the long-term for the interests of the United States itself.

On the other hand, by using the fact that the current US administration considers Russo–American relations friendly, Russia, where necessary, should henceforth, among other things, dissuade the USA from those actions that can be harmful for all the participants of the new "global coalition in the struggle with terrorism."

One should not disparage the role of the UN in preventing nuclear conflicts; this especially applies to the UN Security Council which, despite many skeptical evaluations,

possesses significant potential as a controlling influence on international security. The UN and its Security Council, despite all their weaknesses and drawbacks, remains the main legitimate organ for strengthening international stability and security in the eyes of the entire international community.

Notes

[1] A. A. Svechin's book on Clausewitz, published in 1937, is with good reason considered virtually the best work on this topic. It was translated into German and published in Germany in 1998, and was favorably evaluated by experts.

[2] The term "second nuclear age" appeared in recent years in a number of serious American publications; including works by Payne, Braken, and Grey [see K. Payne, *Deterrence in the Second Nuclear Age* (Lexington, Ky.: University of Kentucky Press, 1996); C. S. Gray, *The Second Nuclear Age* (Boulder, Colo.: Lynne Rienner Publishers, 1999); P. Braken, "The Second Nuclear Age?" *Foreign Affairs* (January/February 2000): 146–156].

[3] See A. A. Kokoshin, V. A. Veselov, and A. V. Liss, *Sderzhivanie vo vtorom yadernom veke [Deterrence in the second nuclear age]* (Moscow: IMÉMO-IPMB RAN [Institute of International Security], 2001), 19–21.

[4] Alongside discussion of the factors and conditions behind the appearance of nuclear conflicts, it is necessary to keep in mind both the motives and conditions for the acquisition of nuclear weapons by a country. The following motives for transforming a country into a nuclear power can be tentatively noted: (1) Status considerations. In most cases, this motive is number one. Among other things, the author was convinced of this by conversations with Indian, Pakistani, and Iranian figures. (2) The urge to compensate for general military–political uncertainty [lack of faith in the reliability of one's allies in one's military–political bloc, lack of faith in their readiness to risk their own security for the sake of that of an ally that does not possess nuclear weapons (for example, the perception that the USA's "nuclear umbrella" was unreliable for France, and under the current conditions, for Japan)] (3) The urge to compensate a large imbalance in multipurpose forces in the face of potential opponents (Israel in the face of Arabs with slogans of total war such as "drop Israel into the Mediterranean Sea," which appeared as a reaction to the forced appearance of Israel in one of the most heavily populated regions of the world.) In this case, nuclear weapons often serve as a method of achieving specific military and operational–strategic tasks; among other things, they are regarded as a multiplier of combat capabilities on the battlefield.

The necessary conditions for acquiring nuclear weapons are the presence of consensus in the ruling élite, as well as the presence of a stable layer of technocrats occupied with questions of nuclear weapons and nuclear energy for peaceful purposes for several decades.

It should be recalled that, once they have appeared, nuclear weapons continue to evolve, while new rationales, new tasks, new methods of destruction, and new operational–strategic possibilities appear.

[5] According to several estimates, if nuclear war had occurred between the USSR and the USA at that time, about 100 million Americans and inhabitants of the Soviet Union would have died, along with many millions of losses for Western and Eastern Europe. See. G. T. Allison and P. Zelikow, *The Essence of Decision, Explaining the Cuban Missile Crisis*. Second Edition (New York: Longman, 1999), 1.

[6] The Cuban Missile Crisis of October 1962 is extremely instructive from the viewpoint of the requirements on the strategic control system at all levels—from the commander-in-chief all the way to the rank-and-file pilot of a reconnaissance plane or ship's commander. It seems possible to the author, that the following lessons be drawn from the Cuban Missile Crisis for crisis-control systems under conditions of nuclear conflicts: (1) A nuclear conflict requires constant and rigid control by the highest state leadership, without any significant degree of delegation of power to other persons in the state machinery. (2) A crisis-control mechanism (preferably created in advance) is required, including above all the highest governmental level, as well as the diplomatic mechanism, intelligence services and the armed forces chain of command from strategic to tactical level. (3) Political and psychological stability is extremely important not only among the military leadership, but also in the entire crisis-control group under conditions of nuclear conflict. Both "hawks" and "doves" must be represented in the group. (4) Constant monitoring of a state's own armed forces is required, especially of everything associated with nuclear weapons, by reliable persons from the immediate vicinity of the highest leadership (either a strong civilian defense minister or a special inspectorate like the Gosvoeninspektsiya of the Security Services and RF Security Council in 1997–98). (5) The decision-making mechanisms and stereotypes governing the actions of the other side must be known and understood (it takes years to accumulate this knowledge).

[7] *Izvestiya*, February 10, 1967.

[8] The developers of the concept of "asymmetric response" to the SDI program and of specific technical components of its implementation include such Soviet scientists and specialists as, first of all, Academician E. P. Velikhov (then supervisor in the Academy of Sciences of the USSR, of the main range of military–technical problems as vice president of the Academy and as the chairman of the Committee of Soviet Scientists, created on his initiative), Academicians R. Z. Sagdeev, Yu. A. Osip'yan, B. V. Raushenbakh, and V. I. Gol'danskii, doctors and candidates of sciences A. A. Vasil'ev, A. G. Arbatov, M. I. Gerasev, V. M. Sergeev, M. S. Vinogradov, S. N. Rodionov, O. G. Prilutskii, S. K. Oznobishchev, and others. Among non-classified publications, the concept of "asymmetric response" was presented in the most highly developed form in the following works: E. P. Velikhov, A. A. Kokoshin, and R. Z. Sagdeev, *Kosmicheskoe oruzhie: dilemma bezopasnosti [Space Weapons: A Security Dilemma]* (Moscow: Mir, 1986), 117–127; A. A. Vasil'ev, M. I. Gerasev, and A. A. Kokoshin, "Asimmetrichnyi otvet (vozmozhnye mery protivodeistviya SOI)" ["Asymmetric Response (Possible Methods of Countering SDI),"] *SShA: ékonomika, politika, ideologiya* no. 2 (1987): 27–32.

[9] There is a wide range of potential anti-satellite weapons. Technologies for their production have existed since the end of the 1970s and the beginning of the 1980s (and even earlier, for some types). Anti-satellite systems can be land-, water-, air-, or space-based, and can use either kinetic weapons or directed-energy-transfer weapons (lasers, neutral-particle accelerators). At the beginning of the 1980s, the most advanced R & D involved the creation of systems using the MiG-31 and F-15 heavy interceptors in the USSR and the USA, respectively, with two-stage rockets, or "satellite killers." These missiles were to be launched from aircraft in the upper layers of the atmosphere to destroy satellites in low orbits. There is no need to physically eliminate satellites in order to prevent them from functioning—it is sufficient to "blind" them, to disrupt their communication with the earth, etc.

[10] Immediately after the August Putsch of 1991, the author succeeded in finding a way to simultaneously draw the attention of two leaders to this problem—Mikhail Gorbachev and Boris Yeltsin—in the Academician Yu. A. Ryzhov, who, as head of the Defense Committee of the USSR Supreme Soviet, was

able to communicate with both the above simultaneously. At that time, it required directives from the leaders of both the USSR and the RSFSR simultaneously to compel the military command to carry out a given operation.

[11] The first deputy chief of the General Staff of the RF Armed Forces, General–Colonel Yu. N. Baluevskii, correctly associates the change in attitude of the George W. Bush administration to the question of signing a new treaty with Russia on the limitation of strategic arms (the cutback of strategic offensive potentials) with the effect of the events of September 11, 2001 (See Yu. N. Baluevskii, "Potentsial doveriya. Dogovor o SNP stal novoi real'nostyu" ["The Potential of Trust. The Treaty on Strategic Offensive Potentials has Become the New Reality,"] *Izvestiya.RU*. 9/16/02; http://www.izvestia.ru/politic/23930print.) These events, the subsequent formation by the United States of an antiterrorist coalition, and the need for an ally for the execution of activities in Afghanistan clearly impelled the current leaders of the USA in this direction.

[12] S. Nunn, Co-Chairman, Nuclear Threat Initiative (Testimony before the US Senate Committee on Foreign Relations on the Treaty between the United States of America and the Russian Federation on Strategic Offensive Reductions, July 23, 2002), 1.

[13] Ibid.

[14] The Nunn–Lugar program envisages assistance for Russia and other countries of the CIS to eliminate nuclear and chemical weapons and means of delivery. It also envisages cooperation in assuring security during transportation, storage, and dismantling of the weapons to be eliminated, as well as cooperation in creating suitable guarantees against the proliferation of weapons of mass destruction and means of delivery. All serious specialists and official figures involved in these problems in Russia value this program very highly.

[15] The appearance of American military contingents in Central Asia and later of instructors for the training of armed forces and special services in Georgia caused an appreciable reinforcement of anti-American feeling in the Russian public by the summer of 2002.

On the eve of the Russian–American summit of May 2002, up to 70% of the people polled (according to data from the Russian "Public Opinion Foundation" or FOM) had come to regard the USA as an "unfriendly state." This sharply contrasted with the public attitude, for example, toward Germany (which was regarded in the same period as a "friendly state" by about 60% of the respondents in Russia). The attitude of Russians toward the USA was in even greater contrast to that toward India and China (82% and 75%, respectively, saw these two large Asiatic countries as "friendly" countries with respect to Russia).

On September 11, 2002, in the course of an interactive poll (with about 2000 respondents) during a broadcast of "Echo Moscow," (listeners' calls) with the participation of the author, 70% of the people polled said that they did not regard the USA as a state "allied" with Russia. At the same time, public opinion polls in Russia show that a steady, high percentage of Russians (50–60% or more) are in favor of having good, friendly relations with the USA.

[16] See T. Graham, *Russia's Decline and Uncertain Recovery* (Washington, D. C.: Carnegie Endowment for International Peace, 2002), 59–60.

[17] The National Security Strategy of the United States of America (September 2002), 27; http://www.whitehouse.gov/nsc/nssall.html

[18] The question of the place of our country in the new system of international relations after the break-up of the USSR continues to be undecided, controversial, and sometimes critical. Meanwhile, it is one of the central questions for the development of a sufficiently wide and stable consensus both in the "political class" of Russia and in the nation as a whole, relative to both the country's foreign policy strategy, and a stable line of domestic development of society and the state.

The question of Russia's place in the world hierarchy of states is to a great extent of a sensitive nature for the national consciousness; it is not long ago that our country was one of two superpowers, solving many problems as an equal with the USA. Today, however, the Russian Federation comprises a type of state that occupies a very different position.

Extremes, including on questions of foreign and defense policies, are inherent to the Russian national psychology. This attribute is reflected in how the Russian political élite and the nation as a whole perceive the place of Russia in world politics and, accordingly, those problems that can and must be solved by our country in the world arena, including those relating to the interests of domestic development.

For example, a number of prominent members of the Russian Council on Foreign and Defense Policy think that there is "no alternative" for Russia except rapprochement with the West as with "islands of stability" on the rights of the "junior partner" for the sake of the fastest possible integration into the structures of the most highly developed states of the world (with no pretension to any significant independence in foreign policy). At the same time, in the opinion of a group of deputies of the State Duma, headed by the Chairman of the Committee on International Affairs, D. O. Rogozin, the "universal historical mission of Russia" is to "resist globalization according to the scenario of 'Internationality for the Chosen,' for which Russia remains the only power in the world." In the opinion of this group of deputies and political scientists, Russia must offer the international community new approaches to economic, social, and international policy problems "that make it possible to overcome the egocentrism not only of corporations, but also of nations and states." See *Manifest rossiiskogo patriotizma (Za Rossiyu velikuyu i nedelimuyu) [The Manifesto of Russian Patriotism (For Russia, Great and Undivided)]* National Deputy Center, ed. A. Ya. Bol'shakov, V. V. Gal'chenko, and D. O. Rogozin. (Moscow: Izd. Voenniy parad, 2001), 53.

The definition of Russia's current place in the world is a part of the wider and deeper question of Russia's self-identity in terms of culture and civilization, which also evokes a wide spectrum of opinions, evaluations, ideological stereotypes, and emotions. By defining their country's place in the hierarchy of states and the places of the other main actors in the international arena, government leaders and the élite create a foundation for planning foreign policy and military strategy.

[19] See Condoleezza Rice, "America has the muscle, but it has benevolent values, too," in www.smi.ru. http://www.inosmi.ru/bull/161268.html.

[20] See A. A. Kokoshin, *V poiskakh vykhoda. Voenno-politicheskie aspekty mezhdunarodnoi bezopasnosti [In Search of a Way Out. Military–Political Aspects of International Security]* (Moscow: IMO, 1989), 72–129.

[21] The author has more than once encountered the opinion of prominent governmental and political figures, and experts on questions of strategic control that, even in the United States, in a country with long traditions of civilian control of the military, much more work is still required to strengthen the machinery of the Department of Defense with respect to that of the Joint Chiefs of Staff, including the chairman of that committee and his deputies, the chiefs of staffs of the branches of the US armed forces.

[22] See the section "Modern strategic control in the USA, the FRG, the United Kingdom, and other NATO countries," in the work by A. A. Kokoshin, *Voprosy strategicheskogo rukovodstva oboronoi Rossii (kratkii ocherk) [Questions of the strategic management of Russia's Defense (A Brief Sketch)]* (Moscow: IMÉMO-IPMB RAN[Institute of International Security], 2001), 29–36. An abridged version of this paper was published in a small run in the USA (by Harvard University). See A. A. Kokoshin, *Defense Leadership in Russia: The General Staff and Strategic Management in a Comparative Perspective.* (Belfer Center for Science and International Affairs. John F. Kennedy School of Government. Harvard University, 2002–10. October 2002), 43–56.

[23] Yu. V. Morozov, V. V. Glushkov, and A. A. Sharavin, *Balkany segodnya i zavtra. Voenno-politicheskie aspekty mirotvorchestva [The Balkans Today and Tomorrow, Military–Political Aspects of Peacekeeping]* (Moscow: Center for Military–Strategic Studies of the General Staff of the RF Armed Forces, 2001), 279.

[24] Former First Deputy Secretary of State of the USA Strobe Talbot in his memoirs states that, on the day when the "sub-crisis" surrounding the question of the presence of Russian paratroopers in Pristina was resolved, for the first time in his six-and-a-half years of interaction with Russia as an official, he slept "with real nightmares." Strobe Talbot, *The Russia Hand. A Memoir of Presidential Diplomacy* (New York: Random House, 2002), 347.

[25] See W. K. Clark, *Waging Modern War: Bosnia, Kosovo, and the Future of Combat* (New York: Public Affairs, 2001), 394.

[26] See H. Pirchner, Jr., *The Russia–Chinese Border. Today's Reality* (Washington, D. C.: American Foreign Policy Council, August 2002), 4–11.

[27] Former US Secretary of Defense James Schlesinger declared in 1997 that a Russo–Chinese agreement on the settlement of the "strategic dispute" would mean a fundamental change in the balance of power in East Asia, since it would allow a major part of the Chinese ground forces to be redeployed to the south, making it possible to "project force" with respect to Taiwan, Viet Nam, and the Philippines. See J. J. Dziak, *The Military Relationship Between China and Russia, 1995–2002* (Washington, D. C.: American Foreign Policy Council, 2002), 3.

[28] The issue of the use of nuclear weapons in the "Military Doctrine of the Russian Federation," adopted in 2000, is as follows: "The Russian Federation retains the right to use nuclear weapons in response to the use against the RF and (or) its allies of nuclear and other forms of weapons of mass destruction, as well as in response to large-scale aggression with the use of conventional weapons in situations critical for the national security of the Russian Federation" (Section on "Military-political fundamentals," par. 8). Limitations on the use of nuclear weapons are also mentioned here: "The Russian Federation will not use nuclear weapons against states who are party to the Treaty on the Non-proliferation of Nuclear Weapons, and who do not possess nuclear weapons, except in the case of attack against the Russian Federation, the RF Armed Forces or other troops, the allies of the Russian Federation, or against a state with which the Russian Federation has obligations with respect to security, brought about or maintained by such a state not possessing nuclear weapons, jointly or in the presence of alliance obligations with a state possessing nuclear weapons."

The "Military Doctrine of the Russian Federation" also states that the nuclear weapons with which the RF Armed Forces are equipped are "regarded as an aggression-deterring factor, ensuring the military security of the Russian Federation and its allies and supporting international stability and peace." See Military Doctrine of the Russian Federation. Adopted by Decree of the President of the Russian Federation on April 21, 2000. No. 706. http://www.ipmb.ru/1_3.html.

It can be stated, generally speaking, that the language of the "Military Doctrine of the Russian Federation" in the 2000 edition mean a definite lowering of the "nuclear threshold," which corresponds to the ideas put forward in the Pentagon's Nuclear Policy Review of January 2002 and a number of other official US documents of this period. Taking into account the sum total of all the latest political and military factors and circumstances, such a reduction of the "nuclear threshold" is not required for the national security policy of Russia and the USA, especially if Russo–American relations develop in the spirit of the results of the 2002 Moscow summit between Vladimir Putin and George W. Bush, on a mutually favorable and equitable basis, and Russian–Chinese relations continue in the spirit of the Good Neighborly Treaty of Friendship and Cooperation of 2001.

[29] A. A. Kokoshin, "'Plan Rodzhersa' i alternativnye kontseptsii oborony i bezopasnosti v Evrope" ["The 'Rogers Plan' and alternative concepts of defense and security in Europe,"] *SShA: ékonomika, politika, ideologiya* no. 3 (1985): 18–27; A. A. Kokoshin and V. V. Larionov, "Kurskaya bitva v svete sovremennoi oboronitel'noi doktriny" ["The Battle of Kursk in the Light of Modern Defense Doctrine,"] *Mirovaya ékonomika i mezhdunarodnye otnosheniya* no. 8 (1987): 32–40; A. Kokoshin and V. Larionov, "Protivostoyanie sil obshchego naznacheniya v kontekste obespecheniya strategicheskoi stabil'nosti" ["Opposing Multipurpose Forces in the Context of Ensuring Strategic Stability,"] *Mirovaya ékonomika i mezhdunarodnye otnosheniya* no. 3 (1988): 23–31.

[30] During the joint seminar held by the author and Professor G. Allison at Harvard on October 10, 2002, on the threshold of the fortieth anniversary of the Cuban Missile Crisis, the latter pointed out that the Soviet Union had only sixteen to eighteen ICBMs in operational readiness in 1962, about as many as China has now.

[31] The overwhelming majority of American experts, considering the possibility of direct nuclear confrontation between the USA and China in the coming decades, above all point to the Taiwan problem. For Peking, the solution of this problem has transformed into a symbol of their achievement of genuine sovereignty and a final release from the semi-colonial past of the Nineteenth, and the first half of the twentieth, century, so humiliating for such an ancient and highly cultured country.

[32] See *The National Defense of China* (Peking: Press Chancellor of the State Soviet of the PRC, July 1998), 44.

[33] Ibid., 45.

[34] See D. M. Lampton and R. D. Ewing, *U.S.–China Relations in a Post-September 11th World* (Washington, D. C.: The Nixon Center, 2002), 19–20.

[35] *Annual Report on the Military Power of the People's Republic of China* (Washington, D. C.: DoD, 2002), 27; http://www.defenselink.mil/news/Jil2002/d20020712china.pdf .

[36] The National Security Strategy of the United States of America, p. 27.

[37] Op. cit., p. 27.

[38] T. Donnelley, (Deputy Executive Director, Project for the New American Century), "Preserving Pax Americana," *Outlook* 3, no. 1 (January 2001): 4, 7.

[39] Henry Kissinger, in his fundamental work *Diplomacy*, incorrectly associates, for example, France's decision to create her own nuclear weapons with the threat of the Soviet Union to use nuclear weapons against her during the Suez crisis. This threat was at that time, in his opinion, almost the main factor that compelled her to give way in this conflict. First, as shown by the author's own studies, France made the decision to create nuclear weapons long before these events. Second, the behavior of the Anglo–Franco–Israeli coalition during the 1956 war was most strongly affected by the American threat to bring down the pound sterling if the coalition did not halt its actions.

[40] See V. G. Trukhanovskii, *Angliiskoe yadernoe oruzhie. Istoriko-politicheskii aspekt [British Nuclear weapons. The Historical–Political Aspect]* (Moscow: IMO, 1985).

[41] See I. G. Tyulin, *Vneshnepoliticheskaya mysl' sovremennoi Frantsii [Foreign Policy Thought of Modern France]* (Moscow: IMO, 1982), 80–81.

[42] *Livre Blanc sur la Défense—1994*. Russo–French series, Informational and Academic Materials no. 35 (Paris: Ministry of Foreign Affairs of France, 1994), 50, 52.

[43] According to some estimates, the French nuclear forces cost the French taxpayer at least three times as much as the British. See M. Quinlan, *Thinking about Nuclear Weapons* (London: Royal United Services Institute for Defense Studies, 1997), 63.

[44] The potential role of French nuclear forces in the incipient defense system of the European Union remains unclear. (In creating this union, very important shifts have clearly occurred in the last eighteen months or two years, despite the divergence of opinion about the hopelessness of the EU as a "center of power" with a pronounced military component of that power.) Even though de Gaullism has clearly become weaker in France, there is still no one who contemplates making France's independent nuclear forces part of the integrated armed forces of the EU.

[45] The question of the acquisition by Germany of her own nuclear weapons began to arise in 2001–2 in German political circles (as well as in Japan). Earlier, this topic was virtually forbidden in Germany. This topic became more noticeable in internal discussions in Germany after the deterioration of German–American relations in the autumn of 2002, during the pre-election campaign in Germany and the discussion in the USA of plans for war against Saddam Hussein's regime in Iraq.

[46] See more particularly S. D. Sagan, "The Perils of Proliferation in South Asia," *Asian Survey* 41, no. 6 (November/December 2001): 1064–86.

[47] In December 2001 India, after a series of terrorist acts in Jammu and Kashmir, for which New Delhi blamed Pakistan, brought to full combat readiness its armed forces, to a number of 1.2 million men, and moved a significant part of them to the borders of Pakistan. Such measures were then taken, as halting direct flights of civilian aircraft to Pakistan, and Indian warships were sent into the Arabian Sea. It was only at the beginning of June that these measures were partially countermanded in order to de-escalate the conflict. (See E. Luce, and F. Bokhari, "India Pulls Back from Brink of War over Kashmir," *Financial Times* (June 11, 2002): 1. In the first half of 2002, the likelihood of nuclear war between India and Pakistan was estimated in Washington to be so high that orders were given to begin evacuating American citizens from both countries.

[48] See A. S. Ginzburg, *Pryamye i kosvennye ékologo-klimaticheskie posledstviya vozmozhnogo yadernogo indo-pakistanskogo intsidenta [Direct and Indirect Ecological and Climatic Consequences of a Possible Nuclear Indo–Pakistani Incident]* (Moscow: Institute of Atmospheric Physics, RAN, July 2002), 2.

[49] Some Western authors note that the Pakistani nuclear armaments (to a high degree of probablity) do not have such high standards of safety as do Soviet (Russian) and American nuclear munitions. This creates a fundamentally different likelihood that they will be accidentally detonated, and this could serve as a starting point to begin a nuclear war between India and Pakistan. ["An accidental detonation of a Pakistani nuclear weapon could be interpreted by Pakistan as part of an Indian first (nuclear—A. K.) strike..."] See L. Feinstein, C. Clad, L. A. Dunn, and D. Albright, "A New Equation. U.S. Policy toward India and Pakistan after September 11," Nonproliferation Project. Global Policy Program no. 27 (May 2002): 10–11.

[50] See A. A. Kokoshin and V. V. Larionov, "Protivostoyanie sil obshchego naznacheniya v kontekste strategicheskoi stabilnosti" ["Opposition of Multipurpose Forces in the Context of Strategic Stability,"] *Mirovaya ékonomika i mezhdunarodnye otnosheniya* no. 3 (1988): 23–30; A. A. Kokoshin, "K voprosu o vnezapnosti" ["Concerning the Question of Surprise,"] *Voennaya mysl'* no. 1, (1989): 63–68.

[51] It is suggested in the Western media with increasing frequency, that Iran could become the second target of large-scale actions, by the USA, after Iraq. According to the estimates of many American political scientists and politicians, Iran is a "significantly larger problem" than is Iraq.

[52] See V. O. Guseinov, "O nekotorikh aspektakh kaspiiskoi problemy" ["Concerning Some Aspects of the Caspian problem,"] *Vestnik analitiki* no. 3 (9) (2002):116–131; A. P. Chumakov, *Kaspiiskaya neft' i mezhnatsional'nye otnosheniya [Caspian Petroleum and International Relations]* (Moscow: TsIMO, 2000), 34–42, 212–224.

[53] See T. A. Bagirov, *Mezddunarodnoe znachenie ékonomicheskikh preobrazovanii v neftegazovom sektore Rossii v 1990-kh godakh [The International Significance of Economic Transformations in the Petroleum–Gas Sector of Russia in the 1990s]* (Moscow: Izd. Informdinamo, 1999), 31–32.

[54] At the end of the 1970s and the early 1980s, the introduction of Soviet troops into Afghanistan was regarded by many in Washington as the creation by the Soviet Union of a bridgehead, for a thrust into Iran. The purpose of this was to for the USSR to reach the Persian Gulf, for the sake of establishing control over a significant part of the world's resources of petroleum, in addition to existing resources in the USSR, which by that time had made the USSR into the world's largest petroleum producer. To restrain the USSR from such a step, the USA made a series of gestures that demonstrated readiness to use nuclear weapons against Soviet troops who would move into Iran for this purpose. The author has found no evidence of this kind of strategic planning among the Soviet political leaders.

As a whole, ideas concerning "energy geopolitics" in the upper echelons of power of the USSR were very, very unsophisticated.

A number of serious works on this question appeared at that time in the Soviet academic community, including scientists who had "access to the top." See, for example, E. M. Primakov, *Anatomiya blizhnevostochnogo konflikta [The Anatomy of Middle Eastern Conflict]* (Moscow: Izd. Mysl', 1978), 164–5.

[55] In the 1950s and 60s, the question of acquiring their own nuclear weapons was seriously considered by Sweden, Switzerland, Argentina, Brazil, and a number of other countries.

At the beginning of the 1980s the author happened to hear from a high-ranking Polish officer that at least the Polish military raised the question of the acquisition by Poland of her own (operational–tactical) nuclear weapons with the help of the USSR under conditions similar to those of Great Britain with respect to the USA (the American–British cooperation in the nuclear sphere is one of the most important factors of the "special relationship" maintained by the two Anglo–Saxon powers at the beginning of the twenty-first century). These proposals, to the displeasure of the Polish side, were decisively rejected by the Soviet leaders.

It is highly likely that the most unexpected candidates will again appear in the current decade as members of the "nuclear club."

[56] The director of the Far East Institute of the Russian Academy of Sciences, Corresponding Member M. L. Titarenko, as early as March of 1993 expressed the well-founded opinion that the "nuclear card" is

used by the leaders of North Korea to obtain guarantees of political viability in the sharply changed international situation (after the break-up of the USSR and the crash of a number of regimes in Eastern Europe), as well as to obtain recognition from the West. As Titarenko points out, the leaders of North Korea are impelled to do this by the disappearance of North Korea's main military–political ally, in the form of the USSR, the loss of confidence in the unconditional support of China, and the fear of repeating the fate of the GDR or even of Romania. See M. L. Titarenko, *Rossiya litsom k Zapadu [Russia Faces West]* (Moscow: Izd. Respublica, 1996), 109.

[57] It must be pointed out that the Russian "political class" unfortunately includes active supporters of the appearance of new nuclear states, including Iran (including, for example, State Duma Deputy L. Mitrofanov from the Liberal Democratic Party, the well-known political scientist A. Migranyan, etc.). Their starting point is that the appearance of nuclear weapons in a large number of states will prevent the USA from acting in a spirit of "unilateralism" and will prevent the actions that the United States planned to undertake with respect to Iraq. At the seminar in Moscow on October 2, 2002 (chaired by A. Pushkov), Migranyan tried to prove that Iran, possessing nuclear weapons, will ensure reliable deterrence of those who otherwise would be Russia's direct opponent to her south. Such feelings became stronger in the Russian public in the autumn of 2002, in reaction to the growing belligerency in the USA's behavior in connection with the situation surrounding Iraq.

[58] At the beginning of 2002, American multimillionaire Warren Buffett ("the second richest man in the world") made the statement that terrorists will inevitably use weapons of mass destruction on the territory of the USA in coming years. Because of this, he recommended that insurance companies do not insure risks associated with such terrorist acts. (Buffet's main interests are in the insurance sector, which took large losses as a result of the events of September 11, 2001).

[59] In explaining the new aims of the George W. Bush administration with respect to the use of nuclear weapons, D. Simes, the president of the Nixon Center (in Washington), which is close to this administration, stated that "While nuclear weapons should obviously be used as weapons of last resort, and only against those whom we are convinced are our enemies, we should be ready to deploy them if

we reach an informed conclusion that a state has sponsored chemical or biological attacks against the United States, or provided chemical or biological weapons to terrorists who have done so. Governments facilitating such attacks should not be allowed to hide behind their civilian populations any more than Nazi Germany and Imperial Japan were allowed to do so."

Later, Simes writes that "While the United States should strive **to limit innocent deaths** to the extent possible, our war-fighting strategy must be defined primarily by the need to prevail." See D. Simes "What War Means," *Vestnik analitiki* (published by the Institute of Strategic Evaluations and Analysis, Moscow) no. 1 (7) (2002): 16.

[60] The National Security Strategy of the United States of America. (September 2002, Washington, D.C.), 5, 6, 14, 15; http://www.whitehouse.gov/nsc/nssall.html

[61] The removal of Cuba from this "blacklist" was promoted by former US President Jimmy Carter, who, soon after including this country among the members of the "axis of evil," visited Cuba and spoke extremely positively, concerning a number of Cuba's achievements (including in medicine and in pharmaceutics). This largely removed the suspicion that Cuba was developing bacteriological weapons.

Syria has become more and more firmly fixed on the "blacklist" in the eyes of Washington, making it likely that it will be next after Iraq as an object of strikes by the USA.

[62] The interpretation of Russian scholar Yu. A. Pisarev is very worthy of attention. He has studied how, by whom, and for what political motives the murder of Archduke Francis Ferdinand in Sarajevo in 1914 was organized. Thus, for example, the conspiratorial Serbian organization "Black Hand" (the "Union or Death" association) did not have a well-defined political program. (This author provides an explicit citation from the Serbian Social–Democratic Party's newspaper *Rodnichka noviny* on October 29, 1911: "We have secured the 'Black Hand'! This is the mystical organization of Serbian patriots, a group of officers and intelligentsia with patriotic, and perhaps with neo… ideology.") See Yu. A. Pisarev, *Tainy pervoi mirovoi voiny. Rossiya i Serbiya v 1914–1915 [Secrets of the First World War. Russia and Serbia in 1914–1915]* (Moscow: Izd. Nauka, 1990), 28–29.

[63] The leaders of one of the organizations that participated in the Sarajevo terrorist act. (the "Black Hand" or the "Union or Death" association) were Colonel Dragutin Dimitrijević (alias Apis) (intelligence chief of the General Staff), Major of the Serbian Army Velimir Vemić, and Voislav Takosić. This was a very serious organization; on May 29, 1903 it organized a palace revolution with the assassinations of Serbian King Alexander and Queen Draga Oborenovića. The Black Hand in fact returned the Karageorgević Dynasty to the throne. The Black Hand's proscription lists also included the Bulgarian Tsar Ferdinand, King Constantine of Greece, Prince Nicholas of Montenegro, and finally the heir to the throne of Austria, Archduke Francis Ferdinand. This organization had very complex relations with the Serbian government, which was headed by N. Pašić. Russian Emperor Nicholas II, and the tsarist government as a whole, were opposed to the activity of the Black Hand, since they clearly understood that the activity of this organization could lead to a large-scale collision of Russia with Austria–Hungary, with which Russia was not prepared to go to war (preparedness for war with Austria–Hungary and Germany came in the period 1917–18, and not in 1914). See Yu. Pisarev, *Tainy pervoi mirovoi voiny. Rossiya i Serbiya v 1914–1915 [Secrets of the First World War. Russia and Serbia in 1914–1915]* (Moscow: Nauka, 1990), 29.

In the final analysis, the Black Hand achieved its goal. Yugoslavia arose on a "Serbocentric" basis, including fragments of the Austro–Hungarian Empire, and existed up to the beginning of the twenty-first century. This was achieved at the cost of the breakup of three empires—the Russian, the Austro–Hungarian, and the German—and the immense human losses of the First World War, as well as the defeat of Serbia and Montenegro in 1914–15.

[64] An entire series of American studies on the problems of the activity of radical Islamic organizations note the presence of deep, decades-old connections between a number of these organizations and the Pakistani armed forces and their special services, including interdepartmental intelligence. These connections were especially actively cultivated during the Soviet–Afghan War, when numerous mujahidin from many countries were trained in Pakistan for battle operations in Afghanistan against the Democratic Republic of Afghanistan and Soviet troops. They were trained predominantly with

American money, but the Pakistani armed forces and special services of Pakistan largely worked at resolving their own issues, by no means always allowing Americans to control what was taught in such camps, to whom, and by what methods. See Y. Bodansky, *Bin Laden. The Man Who Declared War on America* (New York: Prima Publishing, 2001), 17, 21–22, 41–50, 127.

[65] G. T. Allison, "The View from Baghdad," *The Washington Post.* (July 31, 2002).

[66] In the course of operations by American and Afghan troops to capture the mountain stronghold of Tora–Bora at the end of 2001 and the beginning of 2002, reports appeared in the Western press that the option was being discussed in the Pentagon, of using low-yield nuclear munitions in this operation, that possess high penetration capability through solid rock. Superficially, from the viewpoint of the reliability of marking as a target such a stationary site, with well-known coordinates and located at a great distance from populated areas, the use of low-power nuclear weapons would appear attractive. However, it is necessary to realistically assess what would occur as a result of this operation. Judging from the information appearing in the press, the main task (to annihilate the leaders of the Taliban and of Al-Qaeda) was not solved—either because they were not there to begin with, or because they vacated this fortress when the battles began.

[67] The prominent American journalist and investigator Thomas Friedman validly notes that the presence of a global information-communication network (the Internet), as a part of the globalization process, greatly promoted the appearance of the phenomenon of figures like Osama bin Laden, whom he ranked (in his meticulous book, devoted to the problems of globalization) among "superpowerful persons." See T. Friedman, *The Lexus and the Olive Tree* (London: Harper Collins, 1999), 11–13.

[68] See A. B. Carter, J. D. Steinbruner, and U. A. Zraket, eds. *Managing Nuclear Operations* (Washington, D. C.: The Brookings Institution. 1987), 614–617.

[69] For more details, see A. A. Kokoshin, V. A. Veselov, and A. V. Liss, *Sderzhivanie vo vtorom yadernom veke [Restraint in the second nuclear age]* (Moscow: IMÉMO-IPMB RAN, 2001), 40–41.

[70] See S. Goldstein, "Bill Would Give Push to Mini-Nuke," *Philadelphia Inquirer* (October 16, 2000): 6.

[71] See S. M. Younger, "Nuclear Weapons in the Twenty-First Century," Los Alamos National Laboratory, Los Alamos, New Mexico: LAUR-00-2850 (June 27, 2000): 1.

[72] There is much that indicates that the economy of the USA and of the European Union are threatened with what occurred in the 1990s in Japan, which entered a long period of stagnation. The capabilities of the basic structural elements of modern economics—corporations, and above all the corporations of the American "monosuperpower"—are in question. In this context, one of the central questions becomes the question of whether the two Asiatic giants—China and India—will maintain high growth rates, and, moreover, to what extent they will maintain their gap with the USA in the present decade (as they successfully did in the 1990s).

[73] It should be kept in mind in this case that, when the ecological and medical/biological consequences of nuclear war were studied in the 1980s (including the "nuclear winter" effect), the scholars adopted as a basis the scenario of massive use of nuclear weapons (primarily strategic weapons) by the USA and the Soviet Union. As pointed out above, under the conditions of the first two or three decades of the twenty-first century, one is dealing with significantly smaller scales of the use of nuclear weapons, with different consequences for the ecology, the climate, and human health.

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