CHAPTER ONE

Introduction

The goal of *Beyond Nuclear Deterrence* is to elaborate on proposals that could help transform the current state of mutual nuclear deterrence, foremost between the two biggest nuclear powers—Russia and the United States—into a new mode of relations based on mutual management of nuclear weapons balance and control over its impact on international security. Transformation of this kind, beginning in a bilateral format, will at some point have to embrace multilateral strategic relations among the five principal nuclear powers and the new nuclear weapon states, as well as some aspects of the development, deployment, and use of conventional forces.

Even when dramatic changes occur in the political relations between nuclear states that make them stop seeing each other as adversaries, as with Russia and the United States following the Cold War, these states' armed forces, and foremost their nuclear forces, retain the powerful momentum of confrontation and competition. These forces cannot adjust to new cooperative political relations on their own without political and technical efforts that are consistent, well designed, and bilateral.

Furthermore, newly emerging adversaries, contingencies, and challenges brought about by nuclear proliferation and various

conflicts of national interests may destabilize strategic relations between the former enemies. The result can be increased tensions in their strategic policies, with highly detrimental political, military, and legal arms control consequences.

For example, the 2002 U.S. decision to test and deploy a strategic ballistic missile defense (BMD) system, allegedly designed to defend the United States from the new countries (that is, "rogue states") possessing ballistic missiles, and Washington's withdrawal from the 1972 Anti-Ballistic Missile (ABM) Treaty, made Russia place increased reliance on its offensive strategic nuclear force. Thus, Moscow extended the service lives of those of its heavy intercontinental ballistic missiles (ICBMs) equipped with multiple independently targeted reentry vehicles (MIRVs) and even purchased a few dozen MIRV missiles from Ukraine's stockpile. Also, as reported by President Vladimir Putin, Russia has accelerated development of a new strategic offensive weapon system fitted with a gliding and maneuvering reentry vehicle designed to penetrate "any BMD system." In keeping with post–Cold War sensitivities no specific opponent has been mentioned, but this new system can only be assumed to be intended to target the United States.

Russia reacted in a similar way to a new U.S. program of nuclear earth-penetrating warheads allegedly designed to destroy underground bunkers in terrorist-held areas and rogue states. Many Russians believe that this program is directed at Russia's own hardened sites. As Russia's defense minister, Sergei Ivanov, said, "Moscow is attentively tracking the developments in the U.S. strategic nuclear force. In particular, we are not indifferent to the U.S. programs of developing mini–nuclear weapons, for each new type of weapon adds up new elements to the general picture of global stability. We are to take it into account in our military planning."[1]

Since the end of the Cold War, nuclear deterrence between Russia and the United States has been receding into the background in terms of day-to-day foreign policy and official public relations. Although both countries retain thousands of nuclear warheads, they have ceased to be global rivals and the chances of a deliberate war between them have fallen close to zero.

Despite serious differences on some issues, such as Yugoslavia (1999), Iraq (2003), Russian domestic politics and their effect on elections in Ukraine (2004), the eastward expansion of the North Atlantic Treaty Organization (NATO, 1999 and 2003), and a growing U.S. presence in several of the former Soviet republics, Moscow and Washington are no longer the leaders of two coalitions of states and political-ideological movements that had made bipolarity the global norm in international relations for almost five decades. Their relations—despite continuous ups and downs, friction, disagreements, and mutual recrimination—include numerous and important areas of cooperation.

This cooperation has embraced various economic and political spheres, peacekeeping operations, resolution of regional conflicts, nonproliferation of weapons of mass destruction (WMD), the struggle against terrorism, joint ground and naval exercises, programs to secure and eliminate stockpiles of nuclear and chemical weapons, safe disposal of nuclear materials and decommissioned nuclear submarines, salvage operations at sea, and joint human space systems.

Since the early 1990s, the United States and Russia have halved their deployed strategic nuclear forces in terms of nuclear reentry vehicles (warheads) under the 1991 Strategic Arms Reduction Treaty (START I), and are expected to reduce them by another 60 percent by 2012 under the 2002 Strategic Offensive Reduction Treaty (SORT). Combined with cuts in both sides' tactical nuclear arms, the reductions will apparently amount to at least 80 percent over the twenty-year period since the early 1990s.

But there is also the other side of the coin. Unlike before, the United States, Russia, and some of the other great powers have openly or tacitly rejected the idea of nuclear disarmament as an indispensable, if abstract, condition of general security. Worse yet, as their official doctrines, arms programs, and military budgets indicate, they are dismantling the complex of central nuclear disarmament agreements to keep maximum freedom of action in technical development and plans for combat use of nuclear weapons. For instance, the George W. Bush administration does not consider it worthwhile even to discuss strategic nuclear reduction measures subsequent to SORT, and has rejected both the

ABM treaty and the Comprehensive Test-Ban Treaty of 1996. The administration has apparently also lost interest in the Fissile Material Cut-off Treaty, as well as universal measures to enhance the effectiveness of the Nuclear Non-Proliferation Treaty.

Moreover, Washington is now emphasizing the right to launch preemptive selective nuclear strikes, thereby promoting a doctrine of actual nuclear warfare rather than of traditional nuclear deterrence. A serious program, although not without disputes and setbacks, is now underway in the United States to develop advanced nuclear weapons allegedly designed to destroy hardened bunkers and other installations of rogue countries and terrorists with less fallout and collateral damage.

This example is being followed by Russia, although with some reservations and a variety of controversial official declarations. After a rather weak resistance, Moscow has resigned itself to the United States' current lack of interest in arms control treaties, and has demonstrated that it cannot oppose Washington effectively at the political, diplomatic, or military-technical levels. Instead, despite scarce funding, Russia unwisely attempts to carry out a "balanced modernization" of all three legs of its nuclear triad (that is, air-, land-, and sea-based systems), shrinks from discussing tactical nuclear weapons, and seeks to make up for its setbacks through the export of nuclear technologies and materials, as well as massive arms sales abroad.

As early as 1993, democratic Russia officially repudiated the no-first-use commitment made by the totalitarian Soviet Union in 1982. During 2000 and 2001 Moscow reconfirmed that position, and it now says that nuclear weapons play a leading role in ensuring Russian national security. Moscow even acknowledges the possibility of "a selective and limited combat use" of strategic nuclear weapons in order to "de-escalate the aggression."[2] This implies accomplishing specific tasks involved in conducting and terminating nuclear warfare, rather than merely deterring aggression through the capacity to inflict "devastating retaliation," as previously claimed by Soviet official military doctrine.

Not surprisingly, Great Britain, France, and China are not going to undertake any limitations of their nuclear forces

through arms control treaties, alleging that they lag far behind the two major nuclear powers. Indeed, all three are implementing planned long-term modernizations and, in some weapon systems, a build-up of nuclear arsenals.

Now, as never before, nuclear deterrence looks like the factor most likely to remain a permanent part of international relations, at least until a more devastating or efficient weapon is invented. Moreover, this posture is taken not because of the colossal technical or political difficulties of achieving "general and complete nuclear disarmament," but because of the presumably considerable "inherent advantages" of nuclear weapons as a means of sustaining national security and "civilizing" international relations by making nations more responsible. Obviously, the Big Five (United States, Russia, Great Britain, France, and China) openly or tacitly treat nuclear deterrence as an indispensable and legitimate instrument of their security and military policies, even as they claim that other countries have no right to acquire nuclear weapons.

Using the traditional Chinese mode of presenting intellectual subject matter (and paying respect to the newly acquired popularity of China's doctrines and policies among some Western and Russian experts), in this study the research is built around a concept that may be called "3 × 3 × 3" (or a "cubed triple") package of paradoxes, assertions, and proposals:

- There are three major paradoxes of post–Cold War nuclear deterrence in the world.
- There are three principal reasons why nuclear deterrence will not serve great powers' national security, and international security, in the long run.
- There are three main avenues of action to transform mutual nuclear deterrence into a more constructive and reliable model of strategic relations while staying short of "general and complete nuclear disarmament."

General and complete nuclear disarmament, as noble a goal as it is, seems at present very distant and unrealistic, because it would require immense changes in the way international

politics has been conducted and conflicts have been resolved throughout known history. Such changes are clearly far outside the purview of this book.

As for the "cubed triple," we believe that the decade and a half that has elapsed since the end of the Cold War has demonstrated at least three great paradoxes in regard to nuclear weapons. The first is that mutual nuclear deterrence between the United States and the Soviet Union (and now Russia) has quietly outlived the two states' global rivalry and confrontation, with which it was closely associated from 1945 to 1991, and which continued in its self-perpetuating momentum even after the collapse of one of the main subjects of deterrence—the Soviet superpower. These inexorable dynamics of mutual nuclear deterrence have acquired a growing and negative "feedback effect" on political relations between former opponents, sustaining a muted though multifarious fear: of the supposed evil intentions of the "strategic partner"; of inadvertent or accidental nuclear attack; of possible loss of control over nuclear weapons leading to their acquisition by rebel groups or terrorists; of the one's plans to gain control over the other's nuclear weapons or to deliver a disarming strike against nuclear sites—all this in the absence of any real political basis for suspecting such horrific scenarios or actions.

The second paradox is that with the removal of the fear of escalation of any nuclear weapon use to a global catastrophe, the United States, Russia, and some other nuclear weapon states have become much more casual about contemplating initiation of the actual combat use of nuclear weapons in service to specific military missions. Thus, the end of the Cold War has actually lowered, not raised, the nuclear threshold, to say nothing of bringing an end to nuclear warfare planning altogether.

The third paradox is that with the end of the Cold War, the focus has been on doing away with nuclear arms limitations and reductions, transparency, and confidence building, rather than doing away with nuclear deterrence and eventually the nuclear weapons themselves. The victims of this process (primarily at the initiative of current U.S. policy makers) already

include the ABM treaty, START II, and the START III Framework Treaty (an agreement on delineation between strategic and tactical BMD systems), as well as near-term entry into force of the Comprehensive Test Ban Treaty, constructive negotiations on the Fissile Material Cut-off Treaty, and potentially even the Nuclear Non-Proliferation Treaty—at least that is how it looks from the results of a disastrous review conference on that treaty in May 2005. The whole structure of nuclear arms control is collapsing, with most dire predictable consequences from the growth of new threats and risks.

Of the three main reasons why nuclear deterrence should be superseded by some type of constructive strategic relationship between the United States and Russia, and eventually among all nuclear weapon states, the first is nuclear deterrence's irrelevance to the real threats and challenges of the post–Cold War era. Deterrence remains effective against the least probable or nonexistent threats: nuclear or massive conventional attacks by great powers (and their alliances) against each other. But it does not work against new "real and present dangers" such as nuclear proliferation, international terrorism, ethnic and religious conflicts, drug and arms trafficking, transborder crime, and illegal migration. Whether nuclear disarmament might prevent nuclear proliferation is a highly debatable point. It is certain, however, that nuclear deterrence cannot stop proliferation, and it is quite probable that deterrence encourages further expansion of the "nuclear club."

The second reason for replacing deterrence with a new strategic relationship is that the relations involved in mutual nuclear deterrence place tangible limitations on the ability of great powers to cooperate genuinely in dealing with new threats and challenges. The degree of cooperation of the Cold War times, when most arms control treaties, including the Nuclear Non-Proliferation Treaty, were concluded, is not enough for the new era. Such endeavors as cooperation between the two states' secret services and special forces, joint counterproliferation policies (for example, Russian participation in the Proliferation Security Initiative, and envisioned actual U.S.-Russian combat operations against terrorists and rogue and failed states), officially

initiated joint early warning and BMD systems, much stricter nuclear and missile export control regimes, greater emphasis on securing and accounting for nuclear warheads and nuclear materials (which implies broad transparency and access to each other's secret sites), verifiable cessation of production of weapons-grade nuclear materials throughout the world, and ambitious Global Partnership projects all require a greater magnitude of trust and cooperation among partner states. But all of these are impossible to imagine while the United States and Russia still aim thousands of nuclear warheads at each other, keep missiles on hair-trigger alert, and modernize nuclear forces to preserve robust retaliatory capabilities against each other. Besides, as mentioned above, the momentum of nuclear deterrence in combination with new threats and missions may destabilize strategic relations among the great powers, further undercutting their ability to think and act together.

The current crisis over the Iranian nuclear program, despite the apparent similarity of the U.S. and Russian positions, provides a good illustration of this point. Neither the United States nor Russia wants Iran to have uranium enrichment or plutonium reprocessing capabilities, to say nothing of the potential effect of Teheran's acquisition of nuclear weapons. However, action in the form of United Nations Security Council sanctions against Iran, or a UN resolution calling for the use of military force, is where U.S.-Russian unanimity stops. For the United States, the prospect of eventually being targeted by Iranian nuclear missiles is totally unbearable and warrants all means of prevention. For all conservative Russians, the dire political, economic, and security implications of supporting (even if passively) UN sanctions or U.S. military action against Iran—Russia's long-standing partner—may be seen as too high a price to pay. After all, as hard-liners would point out, Russia is already targeted by thousands of U.S. nuclear weapons, as well as by the nuclear weapons of American allies and partners (Britain, France, Israel, and Pakistan). A nuclear-armed Iran would not add much to this picture, and probably would target its missiles elsewhere anyway.

The prospect of Iranian nuclear materials or weapons being leaked to Islamic terrorist organizations is much more frightening. However, Russian hawks would claim that this is a hypothetical scenario, while actual transactions of that kind might have been already discussed or attempted through A. Q. Khan's black market connections with the Taliban, Al Qaeda, and Iran—without ensuing aggressive U.S. attempts to investigate and prosecute the case. Apparently, this benign position was motivated by Washington's desire not to destabilize its partner regime in Pakistan. As for Russia, its political-strategic elite would be deeply split if it had to make a choice between cooperation with its partner regime in Iran and cooperation with the United States, particularly in view of the state of U.S.-Russian strategic relations.

The third reason for a new strategic relationship is the problem of resource allocation. Sustaining nuclear deterrence at current levels, or even at reduced levels (such as the 1,700 to 2,200 deployed warheads called for under SORT), is an expensive luxury, given that the two biggest powers assign the bulk of these forces the mission of destroying each other, as well as serving "as a hedge against future uncertainty." This aimless "hedge" may be relatively inexpensive for the United States, which has the largest overall defense budget in the world (about as big as the sum of all military spending by the other major powers), and which fully modernized its strategic nuclear force during the 1980s and 1990s, investing in "strategic capital" that will last for decades into the future. Still, even for the United States it would be easy to find a much better allocation of these resources, whether within its defense budget or outside it.

The burden of maintaining robust nuclear deterrence is heavier for Russia, which is now implementing a "balanced modernization" of all elements of its strategic triad and planning to keep up with the SORT ceilings of 1,700 to 2,200 warheads. Faced with having to fund an enormously expensive process of military reform, as well as extensive modernization and restructuring of its conventional forces, Russia nonetheless

suffers the expenditure of huge sums on nuclear weapons. The budget share for nuclear deterrence is relatively even bigger for France, Britain, and China.

By maintaining mutual nuclear deterrence, the great powers are wasting resources that otherwise could be applied to more appropriate military and security tasks and missions. Moreover, significant scientific and technical intellectual resources are tied up by nuclear deterrence. Powerful state, business, research, and political organizations are locked into sustaining nuclear confrontation in economic, technical, and mental respects, instead of addressing the more realistic and urgent needs of national and international security.

Another, more general objection to nuclear deterrence is not directly linked to nuclear weapons, so it is not included in our $3 \times 3 \times 3$ package. Still it is worth mentioning. Russia's domestic economic and political evolution is inseparable from its foreign policy. It is impossible to imagine Russia evolving as an advanced market economy and democracy without good relations with the United States and gradual economic, political, and security integration with the European Union.

For the West, consistent cooperation with and integration of Russia is potentially an immense asset in providing for security in Eurasia. The benefits include gaining from Russia's science, technology, and cultural resources; coping with the unpredictable future of the supply of energy and raw materials; containing Islamic radicalism; addressing the proliferation of WMD; dealing with international terrorism; and managing relations with a growing China.

Mutual nuclear deterrence between Russia, on the one hand, and the United States, Britain, and France, on the other, is a latent but real barrier to such cooperation and integration. Although it would be presumptuous to claim that Russian democratic development and economic reform directly depend on doing away with nuclear deterrence, transforming deterrence as part of a process of forging closer security relations with the West would certainly advance Russia's progress toward democracy and economic integration with the West.

The first of the three avenues toward the end of nuclear deterrence is to "de-alert" and further reduce the Russian and American nuclear forces. The second is to develop and deploy a joint ballistic missile early warning system (BMEWS) and a missile proliferation monitoring system. The third is to develop and deploy joint BMD systems. Initially, the second and third avenues would be limited to nuclear and missile proliferation threats, but eventually—in parallel with transformation of the nuclear forces of both sides—they would embrace a growing part of the strategic assets of the two powers and their allies, and would transform their present mutual nuclear deterrence into a qualitatively new type of strategic relationship.

This new relationship could be called "nuclear partnership," "joint management of nuclear weapons," "cooperative nuclear weapons policies," "a common nuclear security framework," "a mutual nuclear insurance [or assurance] strategy," or any number of other names, depending on one's tastes and semantic skills. In any case, the main problem is not the term, but the substance, and it is the substance that is the subject of this book.

Chapter 2 of this book deals with the historical experience of nuclear deterrence. Presently, as applied to the policies of the Big Five, nuclear deterrence is commonly perceived as something that emerged naturally in past decades and that provides a guarantee against a third world war. Historical and methodological analysis does not support such an assessment, although neither does it refute it completely. In contrast to claims made by many politicians and experts, the evolution of nuclear deterrence, along with its character and impact on the likelihood of war, looks more ambiguous. Analysis of this matter gives much food for thought and creates apprehensions concerning the past and future of nuclear deterrence in strategic relations among the Big Five powers.

Chapter 3 addresses the basic aspects of the nuclear policies of Russia and the United States, and outlines the policies of Great Britain, France, and China. The Big Five's strategic concepts, forces, and programs of nuclear force development are investigated, for these factors are much more reliable indicators of an

actual nuclear policy than official political declarations, which tend to be ambiguous and controversial.

Chapter 4 addresses the present dynamics of nuclear deterrence, its feedback effect on political relations, and the relevance and potential new roles of arms control in the post–Cold War era.

Chapter 5 describes possible measures for transforming U.S. and Russian offensive nuclear forces, in order to stabilize their balance at still-lower levels (in view of some destabilizing prospects), to move them away from hair-trigger alert status, and to unlock them from overwhelmingly targeting each other. These initial steps would lay the groundwork for abandoning mutual nuclear deterrence as the cornerstone of the strategic postures of both nations.

Chapter 6 presents proposals for building on the initial initiatives to do away with mutual deterrence by integrating the early warning systems and antimissile defense systems of the United States and Russia. Methods of integrating third nuclear weapon states into the new mode of strategic relations are also suggested.

In the conclusion, general observations are offered on the dialectics and dilemmas of nuclear weapons, as well as a detailed list and tentative time frame for technically, strategically, and politically realistic steps to be implemented bilaterally and multilaterally to achieve the stated goal: getting free of the exhausting, deadlocking chains of nuclear deterrence.

Notes

1. An explanation by Sergei Ivanov of the goals and tasks of the Russia nuclear forces; in Russian, 2004, available at www.rol.ru/news/misc/news/04/07/14_010.htm.
2. *Aktualnye zadachi razvitia Vooruzhennykh Sil Rossiyskoi Federatsii* [Urgent tasks of the armed forces of the Russian Federation]. (Moscow, 2003), pp. 41–42.