

Nuclear Deterrence in the 21st Century
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In the 20th century, any discussion of the great strategic issues of the day necessarily included a discussion of nuclear deterrence. After all, nuclear issues were at the center of the Cold War and at the heart of European security. In the 21st century, nuclear issues are far less central. As the agenda for this course well demonstrates, the great strategic issues of the new era are still taking shape. Thus it remains unclear what role nuclear weapons will play in the 21st century.

In my attempt to bring some clarity to this topic, I will proceed as follows. I will begin with a brief review of the disarmament debate. One of the key hypotheses of the disarmers is that the conditions are now ripe for further substantial reductions in the nuclear arsenals of the United States, France, and United Kingdom and in the role of nuclear weapons in their security strategies. I will review the conditions they have described and then assess whether they exist. I do not believe that they do. This tells us that our nuclear weapons have a continuing role—but not what that role actually is. To explore that topic, I will review the thinking of Russia, China, and North Korea about how to safeguard their interests in possible military confrontation with the United States. Their “theories of victory” (to invoke a term from the Cold War) have important implications for us.

At this time of uncertainty about the role of nuclear weapons in the 21st century, it is not surprising that there is renewed advocacy for the abolition of nuclear weapons. The arguments against nuclear weapons are made on many grounds. Some disarmers see nuclear weapons as relics of the Cold War, destined for the dustbin of history like the Soviet Union and communism. Others see them as morally unacceptable and seek to ban them with the argument that their use in war would violate international humanitarian law. Others see their value as a military deterrent as unproven and seek to eliminate them before terrorists use them. These arguments are attractive to many but are unlikely to prove effective in persuading all of the nuclear weapon states to agree to eliminate these weapons.

A separate set of arguments is made by those who argue for additional substantial steps by the three Western nuclear-armed allies to reduce the number of weapons in their arsenals and the role of nuclear weapons in their security strategies. Their written reports describe various conditions that they believe now exist (or can soon be brought into being) for our three nations—the United States, France, and the United Kingdom—to be able to take these additional steps safely. These conditions, they argue, include the following:

1. Russia is willing to join the United States in taking the next steps to reduce nuclear arms beyond the force levels reflected in the New START Treaty now in place.
2. China is willing to accept restraint on its nuclear forces and also new forms of nuclear transparency.
3. Other states with nuclear weapons are prepared to join the United States in moving away from reliance on nuclear weapons.
4. The nuclear umbrella provided by the United States to its allies can be eliminated.
5. All states are prepared to join in a solid and durable political consensus against nuclear weapons.
6. An alternative deterrence construct for the 21st century is now possible, one that replaces dependence on U.S.-led alliances with a functioning collective security mechanism.

Do these conditions in fact exist? A brief survey of the security environment points to the conclusion that none of these conditions exist.

President Putin's deep commitment to nuclear weapons as a symbol of Russia's great power status and as a tool of military coercion has been fully demonstrated by events of the last year. Nuclear threats have played a central role in his effort to push back against a European security order he sees as threatening, unjust, and unstable. Nuclear exercises have been used frequently to signal his political resolve and to threaten NATO. At a time of declining Russian state budgets, he has increased funding for new nuclear forces. From an arms control perspective, Russia has rejected the proposal of the Obama administration to take an additional one-third reduction of deployed strategic nuclear forces. It has also rejected administration proposals to address both non-strategic and non-deployed nuclear forces in a future agreement. Russia has also violated the Treaty on Intermediate-range Nuclear Forces and may yet proceed with the deployment of banned weapons. It has rejected cooperation with NATO on ballistic missile defense and has tied any future arms control measures to a long list of grievances about what it sees as threats to strategic stability posed by developments in the U.S. non-nuclear military posture.

Do these developments mean that Russia will never agree to further nuclear reductions? Perhaps. But a better answer is that it is too early to tell. The New START Treaty remains in force until 2021 and can be extended once for five years by mutual consent. It is in Russia's interest to play "hard to get" until the legal regime actually comes to an end. Thus we may have to wait until 2021 or 2026 before it becomes clear whether or not the era of nuclear arms control with Russia is over.

China's nuclear policy and posture are vastly different from Russia's. Its nuclear forces are far smaller, numbering in the low hundreds rather than the many thousands. It has not put nuclear weapons at the center of its military or national

security strategy in the way Russia has. But it too is engaged in a major modernization program. This program is leading to an increase in the number of nuclear weapons deliverable at very long ranges. It is also leading to a diversification of China's nuclear forces, as it deploys new road-mobile and sea-based systems. It has led to new transparency about China's nuclear policy and strategy. But it has not led to new transparency about China's nuclear weapons and delivery systems, which remain taboo topics. China rejects any restraints on its nuclear forces at this time. It has, however, expressed its willingness to join arms control at some future time. In the 1980s it said this would happen when the superpowers cut their arsenals by 50 percent. Of course, that point came and went a long time ago, without any action by China. It sees no benefit to accepting nuclear restraint when it is a rising power facing so much uncertainty in its security environment, especially vis-à-vis the United States.

With regard to other nuclear weapon states, of course both France and the U.K. have both been willing over the two decades since the end of the Cold War to redefine and reduce nuclear requirements in light of the end of the military threat from the Soviet Union and Warsaw Pact. But what about states other than the five recognized as nuclear weapon states by the Nuclear Non-Proliferation Treaty? Over the last three decades, some states have abandoned nuclear weapons or nuclear weapons programs (for example, South Africa, Ukraine, Libya) while others have moved in the opposite direction (for example, India, Pakistan, North Korea, and Syria). Of course today a central question is whether Iran will agree to stop short of a military capability and remain content with a latent technical capability.

Let me focus here on a country of key concern for the United States: North Korea. Despite intense political and economic pressure, Pyongyang has crossed the nuclear threshold and is moving toward a small nuclear force of perhaps 60-80 nuclear weapons by 2020 with the associated delivery systems. This creates significant new pressure on U.S. allies in Northeast Asia and on the United States. It appears that the only viable means to achieve the future denuclearization of the Korean peninsula is regime transformation in Pyongyang. We cannot judge whether this is years or decades away—or even if it is probable.

The future of the U.S. nuclear umbrella has been a topic of intense focus in recent years as the Obama administration has worked with its allies in Europe and Northeast Asia to adapt extended deterrence to 21st century requirements. Here in Europe, NATO alliance leaders have repeatedly re-stated their commitment to NATO as a nuclear alliance. In the 2012 Deterrence and Defense Posture Review they also repeated their commitment to maintain NATO's unique nuclear sharing arrangements and the associated deployments in Europe of U.S. B-61 nuclear bombs. For those NATO allies most anxious about developments in Russia and the Middle East, these sharing arrangements and U.S. deployments remain a valued form of proof of the transatlantic link. In Northeast Asia, America's two allies—Japan and South Korea—have taken a strong interest in the effectiveness of U.S. nuclear deterrence at a time of rising concern about a nuclear-armed and belligerent

North Korea. And in Japan, there is also rising concern about an increasingly confident China that is also increasingly assertive militarily in the maritime environment. These two allies take a very strong interest in the credibility of the U.S. commitment to maintain an ability to deploy nuclear weapons into any region in the world in defense of an ally.¹

What does this imply for the hypotheses that all states are prepared to join in a “solid and durable political consensus against nuclear weapons” and that an alternative deterrence construct is viable now? The conclusions are obvious. All states are not prepared to join such a consensus. Collective security has not become a viable substitute for cooperative and common security. Collective security mechanisms have many positive values but have proven ineffective in dealing with some of the most pressing security challenges today, including nuclear proliferation in Northeast Asia. This has something to do with the fact that collective security requires a concert of major powers, a concert that is not possible today given the deep anxieties in Moscow and Beijing about U.S. power and U.S.-backed international orders and thus their strategies to counter-balance the United States rather than join it in common purposes.

In sum, this brief survey points to the conclusion that the conditions do not now exist for the three nuclear allies to take additional substantial steps at this time to reduce the role and number of their nuclear weapons. This is nothing to celebrate. This is a sad reflection of a security environment that remains dangerous but in new and different ways from the Cold War. The ambitious disarmament agenda was better suited to the era marked by celebrations of the “end of history” (to recall Frank Fukuyama’s famous 1989 essay) than to the new era of “strategic piracy” (to recall the last book by Therese Delpech).

This line of analysis points to a continuing role for the nuclear weapons of the three nuclear-armed allies. But this line of analysis has not helped us to understand the precise nature of that continuing role. Do we keep nuclear weapons simply because others have them? Or, having chosen to keep them, do we require something specific of them?

In my view, the necessary point of departure here is to develop a better understanding of how potential adversaries might try to use nuclear weapons to our disadvantage. By “use,” let me take a very broad definition. That is, we should understand that nuclear weapons have both military and political uses, and they can be highly consequential even if never employed in war. The American scholar-statesman Paul Nitze once described this role as follows:

¹ This will be the focus of my March 9 lecture. See Brad Roberts, *Extended Deterrence and Strategic Stability in Northeast Asia* (Tokyo: National Institute for Defense Studies, 2013).

Whether or not atomic weapons are ever used in warfare, the very fact of their existence, the possibility that they could be used, will affect all future wars....The situation is analogous to a game of chess. The atomic queens may never be brought into play; they may never actually take one of the opponent's pieces. But the position of the atomic queens may still have a decisive bearing on which side can safely advanced a limited-war bishop or even a cold war pawn.²

Let me now cite a different authority—former Chief of Staff of the Army of India General K. Sundarji. In 1992, he was asked about the lesson of the rout of Iraq from Kuwait. His answer: “don't mess with the United States without nuclear weapons.”³ How might Russia, China, or North Korea think about using their “atomic queens” to “mess with” the United States or a U.S.-led coalition? Do they have a theory of victory that would lead them to calculate that it would be possible to escape such a confrontation with their interests intact or somehow advanced—and that would guide their actions in crisis and war?

To better understand this topic, my own research has focused on developments in the military doctrines of Russia, China, and North Korea. There are many differences between them, of course. They sit in different regions. They imagine different potential pathways to military confrontation with the United States. And of course they have very different capabilities. But they also face a common problem: how to safeguard their interests in time of confrontation with a conventionally superior nuclear-armed adversary (that is, the United States and its potential coalition partners). And they appear to have arrived at some common concepts and approaches.

Each seems to have a theory of victory in the spirit of Sun Tzu. That is, each seems to believe that it may be possible to “subdue the enemy without fighting.” For example, leaders in Pyongyang appear to believe that they can convince the United States to abandon what they call its “hostile policy” with nuclear threats and non-nuclear provocations.

Each seems to also have a theory of victory in the spirit of Clausewitz. That is, each seems to believe that it can quickly achieve a *fait accompli* at the conventional level of war that would then be reversible only at high cost by the United States and its partners. Each also seems to believe that nuclear threats could play a role in reaching a “culminating point in war” (as Clausewitz called it) when one enemy chooses to capitulate to the other because he is no longer willing to run the costs and risks of continued war.

² Paul Nitze, “Atoms, Strategy and Policy,” *Foreign Affairs*, Vol. 35, No. 1 (January 1956).

³ The view was expressed to a conference of the Defense Nuclear Agency in June 1993. See *Proceedings*, Defense Nuclear Agency Second Annual Conference on Controlling Arms, Richmond, Virginia, June 1993.

Each seems to believe that it has a credible strategy for managing the risks of escalation by the United States and its partners if they choose not to act with the desired and expected restraint. Threats to and attacks on U.S. regional allies appear to be prominent in this regard, with the hope that they would persuade those allies to abandon the fight and leave America to fight alone or not at all. Threats to and attacks on the U.S. homeland also appear to be part of this strategy, with the hope that a small first strike would persuade America that its interests in protecting an ally are not worth the risk of additional strikes on the American people.

These are strategies for nuclear blackmail and brinksmanship. They are strategies for keeping a limited war limited that accomplishes the local objective of “messaging with” the United States by persuading Washington that a decision to unleash the full military potential of the United States would result in destruction on the United States and its allies beyond their stake. These are not nuclear war-fighting strategies as we understood them during the Cold War. But they may require limited and local employment of nuclear weapons as a means to demonstrate political resolve. This appears to be the logic of Russia’s nuclear de-escalation strikes, for example. It is important to note that Russia has all of the capabilities in place to pursue such a nuclear war-fighting strategy if its leaders were to choose to do so.

These might be called “red theories of victory.” They present us with a new set of deterrence challenges. These can be arrayed across a spectrum from the least intense forms of conflict to the most intense. At the low end are decisions by the regional adversary in situations short of war to conduct military provocations of various kinds. At the high end are their decisions to attack the American homeland by nuclear and other means. In the middle are their decisions to take military actions that they believe are unlikely to generate a U.S. nuclear response by that they hope will give them a decisive military and political advantage. Elsewhere I have referred to these as the gray zone, black-and-white zone, and red zone.⁴

These red theories of victory compel us to have a “blue theory of victory” of our own. We must have the operational concepts and the capabilities to strip away the confidence of these leaders in their strategies for nuclear blackmail and brinksmanship. They must not believe that they can escalate their way out of failed conventional aggression. They must not believe that limited nuclear employment will be met with a collapse of our political resolve or can be used to secure the results of aggression at the conventional level of war.

From a U.S. perspective, such a theory of victory cannot depend on U.S. nuclear means alone. Nuclear threats are not credible for some problems (in the gray zone, for example—such as preventing Chinese assertiveness in the Western

⁴ Brad Roberts, *The Strategic Values of Ballistic Missile Defense*, Proliferation Paper No. 50 (Paris: Institut Français des Relations Internationales, 2014).

Pacific maritime environment). Effective deterrence across the new spectrum of deterrence challenges requires many tools. Ballistic missile defense, new conventional strike capabilities, and resilience in the cyber and space domains all play a role. Especially important is a balance of conventional forces sufficient to prevent a military *fait accompli* by an enemy.

But nuclear weapons are uniquely relevant to the deterrence of attacks on the vital interests of the United States or its allies, whether by nuclear or other means. And the overall balance of nuclear forces among the United States, Russia, and China is uniquely relevant to maintaining confidence in strategic stability and the avoidance of military flashpoints that might lead to war. This illuminates the role of U.S. nuclear weapons in deterrence, assurance, and strategic stability.

Having spoken from a U.S. perspective about red and blue theories of victory and about the role of U.S. nuclear weapons, let me close with two arguments about the value from a U.S. perspective of the French and British deterrents in this 21st century security environment.

First, the United States values the French and British nuclear deterrents because they enable us to share the burdens and risks of nuclear deterrence. If ever we find ourselves in a situation where our vital interests or those of an ally are at risk, the United States will want to share with our allies the burdens and risks of confronting such an adversary. Because threats to our vital interests will necessarily involve questions of whether or not or how to employ nuclear weapons, we the United States will want our two nuclear-armed allies to be especially close. We will work hard to ensure that our political-military cooperation remains strong throughout a crisis so that no adversary thinks that he can gain by separating us.

Second, the United States values the French and British nuclear deterrents because of what they contribute to the assurance of our NATO allies. In the 2010 NATO Strategic Concept, France re-affirmed that its nuclear weapons, along with those of the United States and United Kingdom, are “the supreme guarantee of the security of the allies” and “contribute to the overall deterrence and security of the allies.” This sent a powerful message at a key moment, especially to NATO’s newest members. Some of these new allies are anxious about developments in Russia’s military policy and posture, doubtful about the collective will of the alliance to defend them, and unconvinced that non-nuclear means alone are adequate for their defense. The assurances provided by three nuclear-armed states are particularly meaningful to them. Obviously this value has only increased since Russia’s annexation of Crimea and Putin’s March statement of intent to “snap back hard” against the European security order. The language in the Strategic Concept also sent a powerful message to other NATO allies—those participating in NATO’s unique nuclear sharing arrangements. The message it sent was about the need for NATO allies to continue to contribute responsibly to the overall deterrence and defense posture at a time of rising external challenges. France is an important model for others.

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