Nuclear Deterrence In a New Age

Dr. Keith B. Payne

Dr. Keith B. Payne is a co-founder of the National Institute for Public Policy, the director of the Graduate School of Defense and Strategic Studies at Missouri State University and a former deputy assistant secretary of defense.

Introduction: On Deterrence

Carl von Clausewitz writes that the nature of war has enduring continuities, but its characteristics change with different circumstances. Similarly, the fundamental nature of deterrence has endured for millennia: a threatened response to an adversary’s prospective provocation causes that adversary to decide against the provocation i.e., the adversary is deterred from attack because it decides that the prospective costs outweigh the gains. The character of deterrence, however, must adapt to different circumstances. In one case, the necessary deterrent threat may be to punish the adversary; in another, to deny the adversary its objectives; in yet another, a combination of punishment and denial threats may be necessary to deter. Such specific characteristics of deterrence—its goals, means and application—change, but the fundamental threat-based mechanism of deterrence endures.

The introduction of nuclear weapons in 1945 dramatically expanded both potential threats and the corresponding means of deterrence, as was recognized almost immediately by some at the time. The contemporary emergence of new types of threats, such as cyber and modern biological weapons, will again affect the character of deterrence. But its nature endures, and the fundamental questions about deterrence remain as elaborated by Raymond Aron and Herman Kahn during the Cold War: who deters whom, from what action, by threatening what response, in what circumstances, in the face of what counterthreats?
Despite the continuity in the basic nature of deterrence, significant geopolitical, doctrinal and technological developments now demand that we again adapt our deterrence goals, means and applications to a new strategic landscape. During the Cold War, US nuclear deterrence strategies had to adapt to the relatively slow changes and enduring continuities of a bipolar strategic environment, and thereafter to the dramatic systemic transformation brought on by the collapse of the Soviet Union and Warsaw Pact. A basic task now is to understand how a third and dramatically different new strategic environment must again reshape the character of our deterrence strategy—its necessary means and application, particularly including the role of nuclear weapons.

Effective deterrence and extended deterrence for US allies requires that US deterrence capabilities be sufficiently credible, as perceived by diverse adversaries, to cause them to decide against the provocations we have identified as unacceptable, now and in the future. Doing so now demands that we be capable of adapting our deterrence strategies and capabilities to shifting circumstances, including future adversaries and contexts that are not now obvious. This is a task of uncertain dimensions and unpredictable demands.

The rapid pace of technological innovation and proliferation has magnified the scope of change and uncertainty in the emerging threat environment. Adversaries and potential adversaries are improving familiar capabilities and acquiring new and unprecedented instruments of coercion and warfare. Some appear willing to employ or abide by the employment of weapons that have, until recently, been deemed outside supposedly global norms, such as chemical weapons. Improvements in ballistic and cruise missiles, missile defenses, anti-access and area denial measures, hypersonic, cyber and space weapons have or will open new domains for threat and warfare, and, correspondingly, pose new challenges for US deterrence strategies.

This new strategic environment is very different from that of the Cold War or the immediate post-Cold War period. As we consider how to adapt deterrence to the realities of this period we first need to understand the necessary deterrence roles for our nuclear weapons given the emerging spectrum of adversaries and potential adversaries who are pursuing external goals that threaten us, our allies and the existing post-Cold War order in general. Effective nuclear deterrence is increasingly important in this new strategic environment characterized by severe, coercive nuclear threats against us and our allies, and the increasing prospect for adversary employment of nuclear weapons, and possibly other WMD.

Deterring Adversaries and Potential Adversaries in the New Post-Cold War Era

During the Cold War, our deterrence focus was primarily on the Soviet Union, and to a lesser extent on the People’s Republic of China. With the end of the Cold War and the collapse of the Soviet Union, there was a striking reduction in the generally perceived level of nuclear threat from Russia and China, and a corresponding reduction in the generally perceived value of US nuclear weapons and nuclear deterrence. Following 9/11, the United States moved further
away from interest in nuclear weapons, focusing heavily on defeating terrorism for almost two decades. Washington paid limited attention to nuclear weapons, save for consideration of how to reduce their salience and pursue their numeric reduction; the Obama administration in particular highlighted nonproliferation and the elimination of nuclear weapons as the priority goals of US nuclear policy.  

Yet, over the past decade, US adversaries and potential adversaries have moved in a wholly different direction, emphasizing the roles of nuclear weapons and expanding their arsenals. For example, Moscow clearly feels that it must correct an unacceptable loss of position supposedly imposed on it by the West following the collapse of the Soviet Union. Unsurprisingly, Moscow is pursuing Great Power competition aggressively, with a revanchist agenda backed by coercive nuclear threats. Its explicit nuclear threats to the West surpass even those of the Soviet Union during the Cold War, and its nuclear programs, according to Gen. Valery Gerasimov, the chief of the Russian General Staff, already have resulted in the modernization of three-fourths of Russia’s “ground, air and sea strategic nuclear forces.”

In addition, during the Cold War and the decades immediately thereafter, the United States devoted immense time and treasure into the negotiation of, and compliance with arms control treaties and agreements. Now, however, Russia engages in continuing, willful noncompliance with many, perhaps most of its arms control commitments, most notably the 1987 Intermediate-Range Nuclear Forces Treaty (INF), and China avoids transparency and arms control in favor of strategic ambiguity.

Chinese leaders feel that they must overturn a “century of humiliation,” and, in doing so are provoking US allies severely as Beijing seeks to overturn the existing order in Asia. Its illegal expansionism and rapidly growing military capabilities, nuclear and non-nuclear, pose a direct threat to US allies and interests.

These Russian and Chinese goals and worldviews are important to US considerations of deterrence strategies because cognitive studies that were not available in the 1960s or 1970s indicate that decision makers typically are willing to accept greater risks to recover that which they perceive to be rightfully theirs, but are denied. Western deterrence goals to preserve an international order which these Great Powers now seek to overturn will be particularly challenging as they seek to recover what they believe to be rightfully theirs, but now is denied them by Western opposition. Russia’s illegitimate occupation of Crimea and China’s illegal expansion into the East and South China Seas certainly appear to reflect this dynamic.

North Korea’s extreme nuclear threats and long-range means of delivery now pose a clear and present danger to the United States and allies. At this point, North Korea may be merely months away from the capability to launch nuclear armed missiles at US cities. It is imperative that the United States effectively deter this eccentric rogue power.
Iran seeks hegemony in the Middle East and threatens US allies and friends in the process. Iranian leaders correspondingly express extreme hostility toward us and our allies—most recently labeling the United States Iran’s “number one” enemy. Despite the Joint Comprehensive Plan of Action (JCPOA), apparently, Iran could acquire nuclear capabilities quickly if it decides to do so, and it continues to pursue robust missile programs, including the development of long-range missiles. Protecting US allies and interests in the region may become an increasingly challenging goal given Iran’s goals and potential capabilities.

While terrorist organizations continue to threaten us and our allies, we must now recognize the reality of both Great Power and Rogue aggressive nuclear threats and possible employment. This reality is a far cry from the hope and even expectation of the past two decades that such concerns belonged to the past, never to return. Over the past two decades, this belief—that with the passing of the Cold War, interstate nuclear threats were largely gone and US nuclear requirements greatly eased—has been at the heart of virtually every argument against US efforts to modernize aging, “legacy” US nuclear forces and the aged US nuclear scientific and industrial infrastructure. To realists, this belief was an obvious illusion. But it was peddled by a professional anti-nuclear lobby and embraced by those captured by the hubris and feel-good emotion of it all.

Despite the now manifest fact that significant interstate nuclear threats are again a prominent characteristic of the international environment, the claim continues to be repeated that because the Cold War is over, US nuclear deterrence requirements are minimal. For example:

Thankfully those days are over. The Soviet Union disappeared 25 years ago. Current Russian belligerence, although worrisome, does not constitute a renewed Cold War...Our submarines alone give us an assured deterrence...The United States does not need to arm its bombers with a new generation of nuclear-armed cruise missiles...Similarly, the United States should cancel plans to replace its ground-launched ICBMs....

The 20th Century Cold War is over; that is self-evident. But the claim that US nuclear requirements thus are minimal, and correspondingly that, “our submarines alone give us an assured deterrence,” is a highly-speculative non sequitur presented as if a known, self-evident fact. It is, instead, an outdated, imprudent basis for US nuclear policy—a subject area that demands the greatest prudence.

Indeed, the contemporary nuclear threat environment poses more diverse and severe challenge to US deterrence strategy than were operative during the Cold War, with greater uncertainties about the future. No one, regardless of their position or experience, can claim with any credibility to know that some relatively modest set of US nuclear capabilities provides “an assured deterrence” vis-à-vis a broad spectrum of known and now-unknown opponents and
contingencies, particularly for the many future decades in which US nuclear deterrence capabilities are expected to function.

The number and character of states and terrorist organizations that may join the array of adversaries and potential adversaries is uncertain. But new adversaries and nuclear threats undoubtedly will emerge over the multi-decade lifetimes of the fledgling US nuclear programs initiated by the Obama Administration to replace the aging US nuclear triad of strategic bombers, sea-based and land-based missiles. Deterring a diverse array of recognized adversaries and potential adversaries is complicated by their widely divergent worldviews, values, goals, priorities, risk tolerances, determination, and perceptions of US credibility. Deterring future adversaries not yet recognized is, by definition, a challenge for which we must prepare without knowing the precise dimensions of the threats they will pose or the requirements for deterrence.

During the Cold War, the number of deterrence variables was much more limited, and during the immediate post-Cold War era the need for nuclear deterrence supposedly was coming to an end. Now, however, the spectrum of potential opponents and conflict scenarios ranges from the relatively familiar to the largely unfamiliar; the stakes at risk now differ widely; our ability to communicate credible deterrence threats now is less certain; and, our ability to predict when and how deterrence will function increasingly is stretched.

These realities drive the US need to be able to tailor deterrence strategies across an expanding spectrum of opponents and threat contexts, nuclear and non-nuclear. Russia, for example, now emphasizes the role of nuclear coercion and the value of limited nuclear first-use as a tool of statecraft, and to backstop its non-nuclear military expansion. Its notions of “escalate-to-de-escalate” essentially envision nuclear weapons as instruments of coercion to defeat the West’s will and capability to respond in strength to Russian expansionism. Moscow appears to expect that its nuclear threats, or limited first-use if necessary, will compel Western capitulation in crises or conflict. Effective deterrence now requires that the West dispel such destabilizing Russian expectations.

In addition, with the ultimate goal of unifying the Korean Peninsula under its rule, North Korea is expanding its nuclear capabilities and often issues coercive nuclear threats. From the 1990s to the mid-2000s, North Korea used its nuclear program to extort diplomatic concessions, economic assistance, and food aid from us and our allies. Secretary of Defense James Mattis has stated that North Korea now has the capability to strike, “everywhere in the world, basically.” With an emerging capability to threaten the United States with nuclear-armed intercontinental ballistic missiles (ICBMs), the prospect is for even greater demands and coercive nuclear threats by the “shakedown state.” Effective deterrence now demands much greater attention to the deterrence requirements posed by diverse adversaries and contexts, and the force flexibility needed to adapt our
deterrence strategies and capabilities accordingly. In particular, we must understand how to deter Great Powers and nuclear-armed Rogues from exploiting limited nuclear threats and/or escalation for coercive purposes in support of their respective goals to change established orders and boarders in Europe, Asia, and prospectively the Middle East. To do so, we must first understand and address the reasons why some now perceive the freedom to engage in repeated nuclear threats against us, our allies and friends.

Why, for example, might Moscow perceive potential success in a nuclear strategy that includes its escalation to limited nuclear first use. What “gaps” does Moscow perceive in Western deterrence strategies, and how can those perceptions be corrected? The same questions must be answered for all adversaries that follow a similar script, now and in the future.

In this new environment, the range of possibilities and uncertainties has expanded regarding plausible answers to the enduring deterrence questions posed by Aaron and Kahn: whom must we deter, from what action, by threatening what response, in what circumstances, in the face of what counterthreats?

Implications for US Deterrence Strategies and Capabilities

The basic nature of deterrence endures. We do not require a new theory of deterrence, but rather we must pursue the hard work of understanding how to apply deterrence effectively in dramatically new and different circumstances. To wit, we must understand how to deter a more diverse set of adversaries and potential adversaries, from a wider array of specific actions, in a similarly wider array of plausible circumstances, while also hedging against the unknown and unexpected.

Several points may be made now in this regard. First, the set of adversaries and potential adversaries, their goals and capabilities, are far from fixed or familiar, and they will shift over time. So too, the range of US deterrence goals and the nuclear requirements needed to support those goals, now and into the future, can never be considered fixed. Instead, we can be certain our deterrence goals and requirements too will shift over time with the changing threat environment.

Consequently, the existing US policy of “no new” nuclear capabilities, which might have been compatible with an era in which nuclear deterrence requirements were expected to continue fading, is ill-suited to contemporary realities. The United States must be able to adapt its nuclear deterrence strategies and related capabilities to shifting threats; “new” nuclear capabilities may very well be needed and the United States must be able to field those capabilities as necessary to deter.

Second, Clausewitz’ emphasis on the extreme value of “prudence” in defensive war applies equally to deterrence in this new strategic environment. It simply is prudent to recognize the
need for the US capacity to adapt and tailor US deterrence strategies and capabilities as rapidly as possible across a wide spectrum of plausible threat and conflict conditions—some that are now recognized, others that are not now apparent, but surely will emerge. Prudence calls for highly-flexible and resilient US deterrence strategies and capabilities, nuclear and non-nuclear, to deter the much broader spectrum of known and plausible threats and contingencies of this new post-Cold War era. The resilience and flexibility of our deterrence strategies and forces, including nuclear, is essential to our capacity to tailor US deterrence strategies and capabilities to diverse and shifting adversaries, threats, and contexts.

To be sure, since the early years of the Cold War, successive presidents have demanded more flexible deterrence strategies and nuclear forces. The sense behind that demand is ever more apparent with the need for deterrence strategies and forces that must be tailored to an expanding number of potential adversaries and threat scenarios—and prospectively to threats now unknown.

Third, the great value of the US nuclear triad is the resilience and flexibility inherent in the diversity of the triad’s platforms and weapons. That value is not fading, as was claimed often during the immediate post-Cold War years. It is increasing, as has the urgency of the fledgling programs underway to replace all three legs of the US triad reaching the ends of their already-extended service lives. The nuclear infrastructure enabling US nuclear capabilities has suffered decades of very limited investment, and its recapitalization now demands comparable urgency.

Fourth, effective US deterrence now requires that the United States work to deny Moscow’s apparent confidence that it can defeat US and NATO deterrence strategy via threats of nuclear escalation, or actual nuclear first-use in crisis or conflict.

To address the “gap” in the US deterrence strategy as perceived by Moscow presupposes that we can identify the reasons why Moscow believes it has the freedom to threaten nuclear escalation or actually engage in limited nuclear escalation. This is a difficult intelligence challenge because it requires getting inside the minds of senior Russian civilian and military leaders to understand what they think and why, not simply their forces and operations. Nevertheless, on the basis of open Russian writings, it is reasonable to suggest that the reasons underlying Russia’s perceptions of nuclear license include Moscow’s perceptions of advantages in both will and theater nuclear force numbers and options.

Consequently, NATO must work to close Moscow’s disdain for NATO’s will and cohesion. Efforts to do so may be seen in the recent public statement by NATO General Secretary, Jens Stoltenberg: “We are sending a very clear message: NATO is here, NATO is strong and NATO is united.” NATO activities that reinforce that message by demonstrating alliance cohesion and military capability are likely to be critical.
If the “gap” includes Moscow’s perception of advantage stemming from Russia’s much greater theater nuclear capabilities and options, then the United States must determine the most efficient way to close that perceived “gap.” The easy response that undoubtedly will be preferred by many in Washington is to assert condescendingly that Moscow simply should not be so primitive in its thinking as to believe that greater theater nuclear numbers and options bestow an exploitable advantage. That easy, scolding response, however, may well not convince Moscow leaders of the error in their thinking.

Closing that possible gap almost certainly will not necessitate mimicking the extraordinary Russian theater nuclear arsenal, but it will likely demand an expansion of Western nuclear options with a focus on their credibility in Russian perception. Getting this right will be one of the most important deterrence challenges of the coming decade for the United States and NATO. Parallel efforts in Asia in support of Asian allies also will likely be critical.

Fifth, for decades the US has been devoted to the process of nuclear arms control. Most discussions of deterrence and nuclear forces must pay homage to the goal of negotiated nuclear reductions lest they seem unsophisticated. Unsurprisingly, there are calls now for further arms control efforts to solve the deterrence challenges that have been created intentionally, indeed eagerly, by foes, including the mounting North Korean nuclear threat and the great theater nuclear force asymmetry in Russia’s favor.

Arms control can, in principle, contribute to US security by establishing mutual restraints on forces and threatening behavior. However, to be helpful, arms control agreements must be prudent, implemented mutually, and enforced if there is non-compliance. Agreements with negotiating partners who are very likely to violate those agreements, such as Russia and North Korea, carry the serious potential to harm US and allied security rather than help. Unenforced, even well-negotiated agreements are likely to offer only a feel-good illusion of security.

In short, expecting arms control with foes and potential foes to solve the US security problems they have purposefully created is naïve in the absence of: 1) serious US enforcement efforts and mechanisms; and, 2) the types of incentive that make agreements and compliance the opponent’s preferred choice, i.e., to gain relief from feared US capabilities. We learned this lesson with the INF Treaty. As then-Secretary of State George Schultz has stated: “If the West did not deploy Pershing II and cruise missiles, there would be no incentive for the Soviets to negotiate seriously for nuclear reductions,” and, “strength was recognized as crucial to diplomacy.”

For over a decade now, however, the United States has often expected nuclear arms control returns without the necessary investment to warrant Russian interest. The reality that “strength” is necessary for diplomacy was replaced by the idealistic expectation that US restraint would be mimicked by others because that is what others should do. The result of this US lapse into idealism is contemporary Russian disdain for US arms control enthusiasm,
as reflected in the statement by then-Russian Presidential Chief of Staff, Sergei Ivanov: “When I hear our American partners say: ‘Let’s reduce something else,’ I would like to say to them: ‘Excuse me, but what we have is relatively new.’ They [the U.S.] have not conducted any upgrades for a long time. They still use Trident [missiles].”\(^{20}\) The lessons of the past should once again inform US arms control expectations and actions in this new era of intense Great Power competition.

Finally, the roles for US ballistic missile defense (BMD) will take on considerably greater importance in this new era. Given the proliferation of nuclear weapons and means of long-range delivery to countries such as North Korea and potentially Iran, the value of US defensive forces capable of defeating the missile attacks of rogue states, now and in the future, is of paramount importance. US defenses may also be extremely valuable to protect against any accidental or unauthorized missile launches. This is a capability that is growing in importance as missile proliferation continues and if, as has been reported, some established nuclear powers consider a policy of launching their nuclear forces “immediately upon detecting an incoming attack.”\(^{21}\) US defensive capabilities may also be valuable to promote deterrence stability by degrading the confidence any potential adversary might have in the coercive or strategic value of limited nuclear first use.

Conclusion

The international threat environment is in the midst of a significant transition from the immediate post-Cold War period to an era that is much more challenging. During the initial decades following the Cold War, many Western leaders anticipated a “new world order” in which nuclear weapons would play an ever-declining role because nuclear threats had, supposedly, become a thing of the past. With the collapse of the Soviet Union, the US security focus was on regional conflicts and countering terrorism, missions for which nuclear weapons seemed to have little or no role. Correspondingly, the question of nuclear deterrence and the US forces and infrastructure required for nuclear deterrence was not a high priority; indeed, to the extent that US policy focused nuclear weapons, it was largely on reducing their salience and numbers as milestones toward their elimination.

However, the expected “new world order” never arrived, and potential foes never embraced the US goal of reducing the salience and number of nuclear weapons as milestones toward nuclear disarmament. Indeed, over the past decade and more, they have instead moved in wholly contrary directions in support of their efforts to change established orders in Europe, Asia, and prospectively the Middle East. Consequently, the new security environment of the 21st Century is characterized by: intensified Great Power competition; the renewed prominence of nuclear threats against the West by Great Powers and rogues; and, profound uncertainties about the future. There is little or no apparent evidence of movement in fundamentally more benign directions.
Given these harsh realities, the basic nature of deterrence endures, but the character of US deterrence strategies must adapt to a new era. This demands a departure from many of the nuclear policy directions that emerged, on a bipartisan basis, over the past two decades in the expectation of an increasingly benign future. In short, despite serious efforts to leave nuclear deterrence, forces and thinking in the dustbin of history, the United States must once again confront the world as it is and invest in the thinking, nuclear capabilities and infrastructure critical to the deterrence or defeat of strategic attacks, nuclear and non-nuclear.

1. This is a theme of the first chapter of the first book in Vom Keiege (On War). See, Carl Von Clausewitz, Vom Kriege (Hamburg, Germany: Nikol Verlag, 2008), p.49.


5. See the discussion in, Franklin C. Miller and Keith B. Payne, “No More US-Russian Arms Treaties Until Moscow Stops Violating Existing Treaties and Agreements.” Information Series, National Institute For Public Policy, No. 418, March 9, 2017.


