

SSQ STRATEGIC STUDIES QUARTERLY

CD
SPECIAL EDITION

WINTER 2018

VOLUME 12, NO. 4

Conventional Deterrence: An Interview with John J. Mearsheimer

Clausewitz as Counterpuncher: The Logic of Conventional Deterrence

Stephen D. Chiabotti

FEATURE ARTICLE

Deterrence in the 21st Century: Integrating Nuclear and Conventional Force

Robert Peters
Justin Anderson
Harrison Menke

Expectations of Cyber Deterrence

Martin C. Libicki

How Does Nuclear Deterrence Differ from Conventional Deterrence?

James J. Wirtz

Conventional Deterrence Redux: Avoiding Great Power Conflict in the 21st Century

Karl P. Mueller

The Future of Conventional Deterrence: Strategies for Great Power Competition

Robert P. Haffa Jr.

SSQ STRATEGIC STUDIES QUARTERLY

Chief of Staff, US Air Force

Gen David L. Goldfein, USAF

Commander, Air Education and Training Command

Lt Gen Steven L. Kwast, USAF

Commander and President, Air University

Lt Gen Anthony J. Cotton, USAF

Commander, LeMay Center for Doctrine Development and Education

Maj Gen Michael D. Rothstein, USAF

Director, Air University Press

Dr. Ernest Allan Rockwell

Editorial Staff

Col W. Michael Guillot, USAF, Retired, Editor

Donna Budjenska, Content Editor

Nedra O. Looney, Prepress Production Coordinator

Daniel M. Armstrong, Illustrator

Kevin V. Frey, Webmaster

Advisors

Gen Michael P. C. Carns, USAF, Retired

James W. Forsyth Jr., PhD

Christina Goulter, PhD

Robert P. Haffa Jr., PhD

Jay P. Kesan, PhD

Charlotte Ku, PhD

Benjamin S. Lambeth, PhD

Martin C. Libicki, PhD

Allan R. Millett, PhD

Contributing Editors

Stephen D. Chiabotti, PhD, *School of Advanced Air and Space Studies*

Mark J. Conversino, PhD, *School of Advanced Air and Space Studies*

Kelly A. Grieco, PhD, *Air Command and Staff College*

Michael R. Kraig, PhD, *Air Command and Staff College*

Dawn C. Murphy, PhD, *Air War College*

David D. Palkki, PhD, *Air War College*

Nicholas M. Sambaluk, PhD, *Air Command and Staff College*

STRATEGIC STUDIES QUARTERLY

An Air Force–Sponsored Strategic Forum on
National and International Security

WINTER 2018

VOLUME 12, NO. 4

Policy Forum

*Conventional Deterrence: An Interview with
John J. Mearsheimer* 3

*Clausewitz as Counterpuncher: The Logic of
Conventional Deterrence* 9
Stephen D. Chiabotti

Feature Article

*Deterrence in the 21st Century: Integrating Nuclear and
Conventional Force* 15
Robert Peters
Justin Anderson
Harrison Menke

Perspectives

Expectations of Cyber Deterrence 44
Martin C. Libicki

*How Does Nuclear Deterrence Differ from Conventional
Deterrence?*..... 58
James J. Wirtz

*Conventional Deterrence Redux: Avoiding Great Power Conflict
in the 21st Century*..... 76
Karl P. Mueller

*The Future of Conventional Deterrence: Strategies for Great
Power Competition* 94
Robert P. Haffa Jr.

Book Essay

Does Grand Strategy Matter? 116
By: Alexander Kirss

Book Reviews

The New Russia 133
By: Mikhail Gorbachev
Reviewed by: Maj J. Alexander Ippoliti, ANG

Just War Reconsidered: Strategy, Ethics, and Theory..... 134
By: LTG James M. Dubik, USA, Retired
Reviewed by: Doyle Hodges

Conventional Deterrence: An Interview with John J. Mearsheimer

Conducted 15 July 2018

SSQ: Your book *Conventional Deterrence* was published in 1984. What is your definition of conventional deterrence?

JJM: Conventional deterrence is all about persuading an adversary not to initiate a war because the expected costs and risks outweigh the anticipated benefits. When I wrote *Conventional Deterrence*, I was specifically interested in examining situations where two large armies face each other and at least one of them is thinking about attacking the other.

Throughout the first three decades of the Cold War, virtually all the literature on deterrence dealt with nuclear deterrence. Hardly any attention was paid to conventional deterrence. Indeed, I think I am the first person to ever write an article or book dealing explicitly with conventional deterrence. My goal, of course, was to think systematically about how deterrence works when there is a possibility of a major conventional war, but nuclear weapons are not part of the equation.

SSQ: Early in the book you discuss how conventional deterrence is obtained and state, “Conventional deterrence is largely a function of military strategy” (p. 63). Later on you write, “Military calculations will not always deter decision-makers” (p. 209). Can you explain this difference?

JJM: As Clausewitz makes clear, war is an extension of politics by other means. In other words, states invariably go to war in pursuit of specific political goals. The intensity of the political forces pushing a state to countenance war varies from case to case, but sometimes they are especially powerful. States also pay careful attention to purely military considerations. They want to know what is going to happen when the fighting starts and what they are likely to achieve at the end of the conflict. They also want to know how much risk is involved in pursuing their chosen military strategy. Sometimes states will assess that the likelihood of military success is very low, but still go to war, because political calculations dictate that it is worth taking the risk. The two classic cases

of this kind of logic at work are the Japanese attack against the United States in December 1941 and the Egyptian attack against Israel in October 1973.

SSQ: On p. 16 you state, “Since WWII, the nature of conventional war has not changed and there is no reason to expect a change.” Does the idea of war being characterized by clashing mass armies remain true?

JJM: The only reason to rule out the possibility of clashing mass armies is the presence of nuclear weapons. While there is no question that nuclear weapons reduce the possibility of a large-scale conventional war between two nuclear-armed states, there is still a real possibility that such a war might happen. This possibility was a matter of great concern on the central front in Europe during the Cold War, and it is a concern today on the Korean peninsula and on the border between India and Pakistan.

SSQ: How does military reluctance to engage in conflict affect political decisions concerning conventional deterrence?

JJM: There are some cases where political leaders want to go to war, but their country’s military leaders resist, mainly because they are not confident they can achieve their goals on the battlefield. In those cases, deterrence is likely to hold. This logic explains why the German generals initially prevented Hitler from attacking France soon after Poland fell in September 1939.

SSQ: A quote from p. 211 says, “Although a limited aims strategy is hardly ever an attractive option, it is usually not so unattractive that deterrence obtains in a crisis.” Are nations doomed to continue with limited aims strategies?

JJM: Limited aims strategies are not attractive, because limited wars tend to escalate in the modern world. Limited wars usually turn into unlimited wars. Nevertheless, there are sometimes circumstances where the political imperative for war is so powerful that states will pursue a limited aims strategy anyway. This logic explains why the Egyptians pursued a limited aims strategy when they attacked Israel in October 1973.

SSQ: Have determinants of the success of conventional deterrence changed?

JJM: I think the basic determinants remain unchanged. One could argue, however, that conventional deterrence between China and the

United States largely involves air and naval forces, whereas conventional deterrence during the Cold War was more about the clashing of large armies supported by tactical air power. My book, of course, focused mainly on the latter scenario, and thus one could say we need to think more about the former scenario.

SSQ: Is your definition of deterrence the same for nuclear and conventional, and how is conventional deterrence complicated by nuclear weapons?

JJM: The definition for conventional and nuclear deterrence is the same if you are talking about the overarching relationship between military and political calculations and how they interact to affect deterrence. But the military calculations are different in those two realms. For example, it is difficult to see how a military can employ nuclear weapons on the battlefield to achieve meaningful success. That is certainly not the case, however, with conventional weapons. Furthermore, inflicting—or threatening to inflict—immediate and massive punishment on the other side’s civilian population is of central importance in the world of nuclear deterrence. It is not an important consideration in the conventional realm, which is not to deny that civilians sometime end up suffering greatly in conventional wars. But it rarely happens immediately and it is not the equivalent of being vaporized, which is a serious possibility in a nuclear war.

SSQ: Is it possible today to achieve strategic surprise?

JJM: I think it is more difficult to achieve strategic surprise today than it was when I wrote about conventional deterrence in the 1980s. The main reason is that the ability of countries to penetrate each other’s various communications networks has markedly improved in recent decades. Still, one does not want to underestimate how clever states bent on achieving surprise can be, or how obtuse potential victims can be sometimes.

SSQ: Is the concept of conventional deterrence still relevant given terrorist adversaries, and how does regime type relate to conventional deterrence?

JJM: Terrorism is a minor factor in international politics, and it has little to do with conventional deterrence. Regime type has hardly any

effect on conventional deterrence. The underlying logic applies equally to democracies and authoritarian states.

SSQ: How have technological improvements such as precision-guided munitions (PGM), stealth, and missile defense affected conventional deterrence?

JJM: PGMs and missile defense were around when I first started writing about conventional deterrence. Indeed, the first article I ever published was on PGMs and how they affect conventional war. When it comes to weaponry, militaries operate in a very dynamic environment, and the particular constellation of weapons that states have at their disposal at any particular point in time affects the military calculations that underpin deterrence in important ways. What is crucial, however, is how militaries employ the different weapons in their arsenals. Doctrine and strategy matter greatly for both deterrence and war fighting. This has always been the case and always will be.

SSQ: How do you see autonomous weapons systems and artificial intelligence affecting conventional deterrence? Positive or negative?

JJM: While I recognize that autonomous weapons and artificial intelligence add a new twist to warfare, I do not see them making conventional deterrence more or less likely to work.

SSQ: Can we apply the concept of conventional deterrence to conflicts in space and cyber?

JJM: Given that it is possible to have a conventional war in space, one could surely apply basic deterrence theory to that realm, although I have never thought much about how one would do that. It is also possible to imagine two sides waging a nonnuclear war that only involved cyberattacks. One could also apply the logic of conventional deterrence to that realm, although again, I have not studied that issue. One can also imagine both space and cyber being bound up with more traditional military forces in a potential conflict situation. It seems likely, for example, that two large armies facing off against each other in a crisis will be heavily dependent on communications networks that are vulnerable to cyberattacks. Does this create a situation where the side that strikes first wins because it effectively paralyzes the other side's armies, thus weakening conventional deterrence? Or does it create a situation where it does not matter who strikes first, because the victim will retain the capability to wreck the

attacker's command and control? Thus, there is no difference between first strike and second strike, which strengthens deterrence. I do not know the answers to these questions, but there is no doubt we need good answers, because questions of this sort are of central importance for understanding conventional deterrence in the contemporary world.

SSQ: You wrote, "When nations are dissatisfied with the status quo, the prospects for deterrence are not promising" (p. 211). Has there been anything in the past 20 years that would lead you to change your thinking on this?

JJM: No. I think that anytime a state is unhappy with the status quo, it is going to search hard for ways to change it. And that often means looking for ways to use force to alter the existing state of affairs. Dissatisfied states are inclined to appeal to force, because there is no higher authority in the international system they can appeal to for help in dealing with their grievances. As long as the system remains anarchic, states will be tempted to use force to alter an unacceptable status quo.

SSQ: On p. 212 you issue a message for status quo powers: "Beware in a crisis because your opponent is seeking a way to defeat you." Could the United States be deterred by China in a crisis over Taiwan?

JJM: My sense is that in a crisis over Taiwan, the United States would be the status quo power and China would be the revisionist power. After all, Beijing is intent on incorporating Taiwan into China, while Washington is likely to be committed to preventing that from happening. Thus, the question is: in a crisis over Taiwan, could China be deterred by the United States? It would probably be difficult to make deterrence work, because China is deeply committed to ending Taiwan's independence and thus would be searching for ways to make that happen. The United States would certainly want to be aware of these dynamics so as to maximize its prospects of making deterrence work.

SSQ: To quote the book, "When one side has overwhelming advantage in forces, deterrence is very likely to fail Political consequences of continued peace may be so unacceptable that a nation is tempted to pursue an unattractive course of action" (pp. 59–62). Is this the situation today between the US and North Korea?

JJM: There is no question that a state bent on altering the status quo, which also has a huge force advantage over its adversary, is going to be

especially difficult to deter. A good example of this logic at play involves Hitler's decision to invade Poland on September 1, 1939. The German military was far superior to the Polish military in numbers and quality. Plus, the Soviet Union, which was allied with Nazi Germany, promised to attack Poland shortly after the Wehrmacht entered Poland. The United States today is far superior to North Korea in terms of both conventional and nuclear weaponry. There are two reasons, however, why the United States is unlikely to attack North Korea, much less invade it. First, North Korea has somewhere between 20 and 60 nuclear weapons, which it can use against South Korea and Japan, to include the American military forces and their families living in those two countries. Second, China would surely intervene if the United States invaded North Korea, just as it did in the fall of 1950, when American troops crossed the 38th Parallel.

SSQ: A recent study published in *International Security* showed Americans much more tolerant of non-combatant casualties than previously thought. Could these views affect conventional deterrence in the future?

JJM: I do not think so. My sense is that the key considerations that affect conventional deterrence are the likelihood that the military will achieve its aims on the battlefield and the intensity of the political considerations that are pushing the state to countenance going to war. I have not seen much evidence that the decision to launch a conventional war is affected one way or the other by concerns about civilian casualties.

SSQ: Dr. Mearsheimer, on behalf of team SSQ, thank you for sharing your views on conventional deterrence with the SSQ audience. **SSQ**

Clausewitz as Counterpuncher: The Logic of Conventional Deterrence

If the romantic Prussian philosopher crossed paths with trainer Angelo Dundee, he would extol the virtues of counterpunching in boxing as well as in war. We can infer this from Carl von Clausewitz's discussion of offense, defense, and culmination of the two in *On War*. We can also test the strategic counterpunching hypothesis with a quick run through some of the major wars of the past two centuries. They generally demonstrate that it is best to take your opponent's best shot and then counter with what you have left. Ironically, this deterrent strategy, which gained such allure in the nuclear age, may be even more suitable to conventional war.

Clausewitz contends that defense is the stronger form of war, even though it serves a negative object. The reasons for this are manifold and span physical, moral, and psychological factors. In the physical realm, the attacker generally has longer lines of communications that are rendered insecure once they extend into enemy territory. The longer the lines of communication, the greater both their vulnerability and the consumption of energy necessary to deliver goods and services to the front lines or point of attack. Similarly, as the defender falls back from the frontiers, lines of communication are shortened and remain relatively secure in friendly territory. In land combat, knowledge of terrain is important, and the advantage goes again to the defender who has inhabited the territory and knows both the general lay of the land as well as details that may prove tactically and operationally advantageous. Swamps, rivers, hills, and mountains all favor the defender's cause, as does the bullet-stopping power of dirt.

Since the middle of the nineteenth century and the advent of the cylindrical bullet, which pushed the killing range out to nearly a thousand yards, being "dug-in" posed considerable advantage over attacking across the open ground in front of entrenched positions—so much so that the adage was a three-to-one manpower advantage was necessary to confer upon the attacker a reasonable chance of success. With the advent of breechloaders, repeating rifles, machine guns, and carefully registered artillery, the ratio increased. When one adds the logistical disadvantages

facing the attacker to the requirement for overwhelming concentration at the point of attack, the physical strength of the defense becomes apparent.

So too do the moral hazards for the attacker, as the proliferation of mass media make the politics of war a public, global phenomenon. Consider the German response to Louis Napoleon's declaration of war, cleverly stimulated by a German provocation in the Ems Dispatch. This piece of Bismarckian chicanery curiously made the offenders an aggrieved party. Nonetheless, Louis' indiscretion activated a defensive alliance of loosely confederated provinces and set in motion the war that made Germany into a modern state—all while the Austrians, recently defeated by the Prussians at Koeniggratz, stood in the window and watched. Fast-forward to the end of the twentieth century and another aggrieved offender emerged: Saddam Hussein. There is little doubt that Iraq's traditional 13th province Kuwait was stealing oil by diagonal drilling into Iraqi territory. Yet the Iraqi invasion stimulated both international outrage and a measured coalition response that eventually spelled the end of Hussein's regime. In both cases, the ostensible offenders, although seemingly justified in their attacks, suffered moral approbation, eventual defeat, and displacement.

Psychology also favors the defenders, who at the moment of attack become the aggrieved party. It is they who are defending their government, their homes, their women and children, and their way of life. These are powerful incentives to fight and fight ferociously. Fear of loss is typically a stronger psychological motivator than potential gain. When applied to the dynamic of offense and defense in warfare, although the attacker may have much to gain, the defender has more to lose and will fight ferociously to forestall the occasion.

Yet defense serves the negative object. Eventually, nations must take to the offensive to achieve their goals, especially if they seek to eliminate a threat. Such was the rationale for the Archidamian War of Sparta against Athens in the Peloponnesus two and half millennia ago and for the German invasion of Soviet Russia in 1941. Yet both of these wars proved disastrous for the aggressors. When, then, is the right time to attack? Clausewitz provides the answer in his discussion of culmination for the offense and defense. In fine Hegelian fashion, he uses opposites to make sense of these two relative terms. The offense culminates when it can no longer survive a counterattack, and the defense culminates when it can no longer conduct one. Which, then, is more likely to culminate first?

The previous discussion would point to the offense, which, like a spring, loses elasticity when fully extended, while a carefully marshalled defense continues to coil in its face. This assumes, of course, that the defense has the space and time to trade while the offense, like a hurricane ashore, naturally weakens. The ability of the defensive nation to attract allies is also important, since this can sometimes compensate for what is lost to the attack. Such was the case for France in 1914 and the Soviet Union in 1941. Both lost a great deal of their industrial base to the German attack but were shored up by allies until they had sufficiently recovered.

Hence evolves the logic of conventional deterrence. Since the offense is inherently weaker than the defense and loses strength as it proceeds into enemy territory, it is vulnerable to counterattack and generally loses the elasticity necessary to formulate its own counter-response. Also forfeited is the moral advantage that lies with the initial defender. There was little international compassion for the German and Japanese people at the end of World War II, even though both suffered grievously. The uncovering of concentration camps and the most heinous human-subject medical experiments served only to fuel notions of outrage and revenge.

These passions generally fuel the counterattack. Napoleon's adventure into the Iberian Peninsula met fierce local resistance that was aided by the British, and the campaign became a running sore for the republic-cum-empire. It was Portuguese trade with Britain in textiles that stimulated the Iberian campaign in the first place. Similarly, Russian trade with Perfidious Albion in pitch, tar, and lumber in the Baltic violated Napoleon's mercantile policies and provided impetus for his Russian campaign in 1812. Both met with eventual disaster and in combination bled away the advantage in manpower the French *levee en masse* had provided for earlier campaigns. These developments were certainly within the firm mental grasp of Clausewitz, but his backhanded recommendation for a deterrent strategy drew even more support in the wars that occurred in the century after his death.

Most theorists appear to be temporally cursed. Mahan's idea of a decisive battle for command of the sea got little play in the First World War, but many of his dicta were vindicated in World War II, providing one is willing to substitute aircraft carriers for battleships as capital vessels. Similarly, the resilience of populations under air attack in the Second World War made Giulio Douhet's propositions about command of the air ring hollow. Douhet, much like Mahan, was possibly vindicated by

the nuclear age that coincided with the Cold War. Both theorists had to wait about half a century to gain relevance. In the case of Clausewitz, the Pax Britannica of the nineteenth century provided scant opportunities to test his hypotheses in state-on-state conflict. The Crimean War turned on logistics and may have spelled the end of unarmored wooden sailing ships as the *sin qua non* of international power. The Italian, German, and American wars of unification that punctuated the decades immediately following the conflict in Crimea represent a mixed bag of military action with political overtones. While the first two featured decisive battles with immediate political results and appear rather limited in retrospect, the American Civil War was a slog, in which, according to Theodore Ropp, the power that commanded the sea defeated “a people who were too dependent on water transportation.”¹ In most of these nineteenth-century wars, Nathan Bedford Forrest appears to have been the preeminent philosopher. According to the Confederate general, the side that got there “fustest with the mostest” usually prevailed.²

The wars of the twentieth century demonstrated something different. The scale and scope of the two world wars gave full play to all variables in the Clausewitzian formula. Curiously, the industrialization of the participants did little to alter the relationship of people, militaries, and governments to passion, probability, and logic in determining outcomes. In most cases, nations found the industry they needed to prosecute what became industrial wars of attrition.


For World War I, the German attempt to invest Paris with a sweeping envelopment fell victim to dilatory execution and stiffened French resistance along the Marne River. This was aided by the French attack into Alsace-Lorraine being thwarted by German resistance and an immediate counterattack, throwing French troops back across their own lines of communication and providing the necessary reserves in manpower to attack the flanks of the German onslaught attempting to encircle Paris. Things devolved into a stalemate between rail power for the Germans and sea power for the Allies delivering goods and services to a virtually static front that stretched from Switzerland to the English Channel. The French had absorbed Germany’s best blows, attracted allies, and eventually counterattacked along the entire front. It was a war of exhaustion. Although the initial German attack stabilized along the Aisne River and stayed in possession of France’s industrial districts for almost four years, eventually the defense uncoiled and counterattacked. Debilitated by

four years of blockade, short on rations, and dogged by unrest on the home front, the German army collapsed. The strategic counterattack, not by design but happenstance, proved to be the winning formula in the key theater of the war. “Fustest with mostest” gave way to longest with the laatest for the victors.

World War II repeated the pattern. German attacks into Poland, Scandinavia, France and eventually the Soviet Union met with tremendous success. The Third Reich lacked only the oil of the Caucasus to comprise what Halford MacKINDER had called “the world island,”³ an economic unit knit together by railroads and impervious to the predation and strangulation afforded by sea power. Similarly, Japanese attacks in the Pacific took the Philippines, Indonesia, and Indochina while threatening Northern Australia and the Western United States as well as India. Yet again, the fruits of early aggression were spoiled by Allied counterattacks outside Moscow in 1941, at Guadalcanal and El Alamein in 1942, and Stalingrad and the Gilbert Islands in 1943. Although the cross-channel invasion of 1944 was pivotal to Allied success in recovering France and dismantling Germany, it was merely one in a number of campaigns that comprised a massive counteroffensive. Industrialization may have changed the character of war, but its true nature, with all the moral and psychological imperatives, appears to have remained the same. Surprise and freedom of action went to the offender, but the defender proved stronger in the end.

Strategically, the Axis offensives culminated with the attack on Pearl Harbor. The concomitant neutrality pact between the Soviet Union and Japan allowed the former to throw all of its newly acquired and recently moved industrial might at the German invaders. Japan was left to fend for itself alone in the Pacific against the greatest industrial power on the planet. Her plight became clear in late 1942 in the Solomon Islands, a tertiary sub-theater in what was admittedly the United States’ second priority, behind Germany, in the war. Guadalcanal was an encounter battle, and the United States could afford to feed the fray with men and machines at rates the Japanese simply could not match. The moral hazard of the sneak attack, compounded by hideous treatment of American prisoners in the Philippines, provided the psychological sauce for the industrial meat undergirding the US response. Similarly, German behavior in France, and the Soviet Union in the early years of the war in Europe, added fuel to the vengeful counterattack.

Ironically, nuclear weapons may have altered the equation. The Allies could afford to trade time and space in both world wars for the ability to marshal the reserves necessary for the counterattack. While the neutron-stopping power of dirt may indeed provide the wherewithal for a second-strike capability in a nuclear war, to what end? If cities are erased, industrial power eradicated, populations devastated, and perhaps the ecosphere of the entire planet severely damaged; what good is a counterattack? Yes, equal destruction can be visited upon the attacker—but, in that case, no one wins. Perhaps this is why nuclear war has not happened and perhaps why it may never happen. The war itself has become the enemy of its participants, and they realize it. Yet, under this umbrella of nuclear terror, war goes on. Korea, Kuwait, and Kosovo tend to demonstrate the power of the strategic counteroffensive in conventional wars.

Thus, conventional deterrence is rooted in the Clausewitzian logic of war, which comprises physical, moral, and psychological factors. All tend to favor defense followed by offense in an overall deterrent posture. When it comes to conventional warfare, deterrence makes logical and historical sense. Counterpunching works in war as well as boxing, for many of the same reasons. 

Stephen D. Chiabotti
Professor, School of Advanced Air and Space Studies

Editor's note: Steve Chiabotti is the longest serving and only remaining founding contributing editor for *Strategic Studies Quarterly*. Over the past 11 years, he has devoted his expertise and considerable talent to evaluating the content published in the journal. As he transitions to a well-deserved retirement, we wish him all the best and offer our most grateful thanks.

Notes

1. Theodore Ropp, *War in the Modern World* (Baltimore: Johns Hopkins University Press, 2000), 184.
2. Ralph Keys, *The Quote Verifier: Who Said What, Where, and When* (New York: St. Martin's Press, 2006), 72.
3. H. K. MacKinder, *Democratic Ideals and Reality* (New York: Henry Holt and Company, 1919), 90.

Deterrence in the 21st Century: Integrating Nuclear and Conventional Force

Robert Peters, Justin Anderson, and Harrison Menke

Abstract

Potential adversaries of the United States have concluded that upgrading and diversifying their nuclear forces is vital to their defense posture and to prevailing, whether at the negotiating table, on the battlefield, or in future crises with the United States. They seek to use their nuclear forces to coerce partners, fracture alliances, and shape regional security dynamics and future military campaigns. These actions will help leverage their nuclear forces, and create hybrid conventional-nuclear strategies that will ensure future crises or conflicts will include a nuclear dimension from the outset. It may also extend across multiple phases and domains. Since the end of the Cold War, US nuclear deterrence has been marginalized and stovepiped in favor of conventional deterrence. This article asserts that thinking about conventional deterrence independently or otherwise detached from US nuclear forces is not sufficient to counter hybrid nuclear-conventional strategies. Rather, it advocates on behalf of better integration between nuclear deterrence strategies and nuclear deterrence operations with US conventional defense policy, strategy, and planning processes. As such, it supports the call within the 2018 *Nuclear Posture Review* to “strengthen the integration of nuclear and non-nuclear military planning” and offers initial steps forward.



The authors work at National Defense University’s Center for the Study of Weapons of Mass Destruction. Robert Peters is a senior research fellow examining issues related to nuclear proliferation, deterrence operations, and the role of special forces in countering weapons of mass destruction.

Justin Anderson is a senior research fellow focusing on issues related to nuclear forces, nuclear arms control, confidence-building measures, and deterrence.

Harrison Menke is a research analyst focusing on issues related to nuclear forces, deterrence operations, and regional conflict and escalation.

During the Cold War, *deterrence* often served as shorthand for *nuclear deterrence* with US nuclear forces playing a primary role in US deterrence strategies. However, following the collapse of the Soviet Union, nuclear deterrence faded into the background of US national security policy, defense strategy, and military operations. For many policy makers in the 1990s and 2000s, nuclear forces appeared to play a peripheral and declining role. Nuclear deterrence and nuclear-capable forces became increasingly associated with deterring a small set of narrowly defined, highly unlikely scenarios involving attacks against the US or allied homelands with nuclear or other weapons of mass destruction. In turn, nuclear deterrence and nuclear-capable platforms became increasingly marginalized in the national defense community and separate from the exercises and planning associated with conventional forces and conventional operations. Nuclear-capable forces were often viewed as obsolescent niche capabilities that existed for remote emergencies. While such a posture made sense in the immediate post-Cold War international environment, it is increasingly incapable of countering emerging threats.

Yet, as stated in the 2018 *Nuclear Posture Review (NPR)*, nuclear-armed potential adversaries have not followed the United States in reducing the role and salience of nuclear forces.¹ In recent years North Korea, Russia, and China have seemingly surveyed the geopolitical environment, assessed the prospects of a future armed conflict with the United States and its allies, and fundamentally rejected the premise that nuclear forces are fading from geopolitical prominence or declining in military utility. These potential adversaries appear committed to developing and implementing strategies and plans for their nuclear-capable delivery systems that will provide their leaders with various use or employment options across the spectrum of crisis and conflict.² These hybrid strategies combine conventional and unconventional weapons, to expressly include a significant and growing role for their nuclear-capable forces. Such options are likely intended to both complement and support deterrence and other military-political objectives by actively shaping and complicating the decision making and defense planning of their potential adversaries, namely the United States and its global alliances. This is relevant particularly with regard to potential hostilities within their home regions.³ These states appear prepared to deliberately and rapidly escalate up to, and potentially past, the nuclear threshold early within an armed conflict, if necessary. Importantly, their calculus of what constitutes

early and *necessary* in a period of hostilities may fundamentally differ from that of the United States, creating a mismatch of perception and risk assessment that could surprise the United States in the future. This requires a serious reevaluation of how best to deter nuclear-armed adversaries, the role US nuclear-capable forces should play within these deterrence strategies, and how to integrate these forces with other US capabilities to present a seamless deterrence posture.

US deterrence policy and strategy, however, has proven slow to respond to adversary hybrid strategies, as US strategic thought on deterring nuclear-armed potential adversaries has struggled to keep up.⁴ Adversaries have evolved the roles, responsibilities, and capabilities of their nuclear forces as well as integrated these forces with conventional concepts and capabilities. These strategies and operations use a hybrid conventional-nuclear approach to shape and influence regional security dynamics prior to a conflict or crisis by using nuclear capabilities in a manner calculated to place pressure upon US allies and to influence allied and US cost-benefit analyses.⁵ Adversaries may be willing to brandish or even employ nuclear forces to secure victory on the battlefield or at the negotiating table. While potential adversaries of the United States have thought deeply on the topic of how integrating conventional and strategic capabilities can provide new options for deterrence and war-fighting operations, US deterrence thought has remained largely static since the Cold War. Indeed, the United States has yet to develop a cohesive, comprehensive approach bringing together what the Joint Staff defines as the “three Cs” of deterrence: capabilities, credibility, and communication. All of this hinders the ability of the United States to address present and future deterrence and assurance requirements that may require a mix of nuclear-capable and conventional forces simultaneously carrying out a range of operations to deter and defeat an adversary.

With these challenges in mind, this article asserts that nuclear forces will be active components across the full range of Russian, Chinese, and North Korean military activities; thus, thinking about conventional deterrence independently or otherwise detached from US nuclear forces is not sufficient to counter hybrid nuclear-conventional strategies. Rather, we reaffirm the 2018 *NPR* and advocate for more closely integrating US nuclear deterrence strategies and nuclear deterrence operations with conventional defense policy, strategy, and planning processes.⁶ This approach will allow civilian policy makers and military commanders to

better posture US forces and tailor deterrence strategies to address present and future challenges. By ensuring that US nuclear and conventional forces complement each other across geographic theaters and strategic domains, the United States can prevent adversaries from calculating that forces equipped with weapons of mass destruction (WMD) grant them a tactical or strategic advantage in a future crisis or conflict with the United States and its allies.

Understanding Adversary Hybrid Conventional-Nuclear Strategies

Deterrence is about influencing a potential adversary's cost-benefit calculus, assessment of risk, and decision-making processes. It requires a thorough understanding of a potential adversary's priorities, perceptions, and strategies.⁷ Today, it appears a common strategic logic drives adversaries to adopt an approach to the United States and its allies that prominently includes a significant role for nuclear weapons, up to and including their potential employment during an armed conflict.⁸ Indeed, as Indian general Krishnaswamy Sundarji reportedly observed following the 1991 Gulf War, "If you are going to fight the United States, you better have nuclear weapons."⁹ General Sundarji's quip appears to have taken root, as the 2018 *NPR* acknowledges that nuclear-armed potential adversaries are developing, modernizing, and expanding their nuclear forces and integrating them into their military posture and strategy to offset the US conventional advantage.¹⁰ As Gen John Hyten, commander of US Strategic Command (USSTRATCOM), observed, "We have adversaries that are looking at integrating nuclear, conventional, space and cyber, all as part of a strategic deterrent."¹¹ We believe the *NPR* and General Hyten highlight a significant trend and convergence in adversary thinking toward a strategy intended to counter the United States and coerce its partners and allies.

Nuclear-armed adversaries—North Korea, Russia, and China—consider the United States the primary threat to their security.¹² All three believe the United States seeks to encircle them and stunt their regional and global ambitions; in Moscow and Pyongyang this is viewed as part of a broader effort aimed at crippling or deposing their ruling regimes.¹³ For example, the Russian national security strategy explicitly states the United States and its allies seek to oppose an independent Russia in order to retain their dominance in world affairs.¹⁴ Democratic People's

Republic of Korea (DPRK) official statements have echoed the same sentiment, explaining, “the US persistent labeling of the DPRK’s measures for bolstering up the capability for self-defense as [a] ‘threat’ is nothing but a pretext for justifying its aggressive hostile policy towards the DPRK and [its] strategy for dominating Asia.”¹⁵ Should conflict erupt, they believe the United States is prepared to negate their nuclear arsenals, disrupt their command and control (C2), and decapitate their leadership through rapid (conventional and/or nuclear) precision strikes and responsive missile defense intercepts.¹⁶ As Lora Saalman, a scholar on Chinese security issues, notes, “With the addition of prompt global strike (PGS) to [the US] strategic lexicon, Chinese perceptions on US ‘absolute security’ (*juedui anquan*) have assumed renewed urgency and focus. The ability for Washington to conduct a preemptive strike against Beijing without fear of retaliation cuts to the heart of the concept that Washington seeks primacy at Beijing’s expense.”¹⁷

This view is common among leaders in Moscow, Pyongyang, and Beijing. It is informed by their analysis of US-led military campaigns during the post–Cold War era, particularly those that resulted in the overthrow, capture, and/or demise of political leaders who opposed the United States (e.g. Slobodan Milosevic, Saddam Hussein, and Mu‘ammar Gadhafi). This fear was aptly described by Alexei Arbatov, former deputy chair of the Russian Duma Defense Committee, in 2000:

The NATO bombing campaign against Yugoslavia has left the Russian people with a vivid image of a possible future scenario—with Russia on the receiving end of surgical strikes against industrial, infrastructure, and military targets. These strikes would be especially targeted against nuclear forces and [command, control, and communication] sites, and would be sufficiently selective not to provoke a nuclear response. They would, however, efficiently destroy Russia’s deterrence capability within a few days or weeks.¹⁸

In Arbatov’s assessment, no target can be assumed to remain beyond the reach of the United States. Russia, China, and North Korea fear that continued US investment in advanced technologies may grant Washington an even broader suite of options to methodically and systematically dismember their regimes in the future.¹⁹ As explained by North Korean state-run news agency KCNA, only robust nuclear capabilities can preserve the regime: “The Saddam Hussein regime in Iraq and the Gaddafi regime in Libya could not escape the fate of destruction after being deprived of their foundations for nuclear development and giving

up nuclear programs of their own accord.”²⁰ It should be noted these concerns are particularly acute in Pyongyang and Moscow; in relative terms, China appears to feel more secure against the United States—but similarly chafes against a regional and international security order it believes favors the United States and keeps others, to include their state, from growing strong enough to either challenge it or reshape the Indo-Pacific region to their liking.

Concerns over US capabilities and intentions have collectively increased North Korean, Russian, and Chinese commitments to nuclear forces. They consider these forces vital to securing their status as major powers and compensating for inferior conventional military capabilities. All three fundamentally reject the idea that nuclear weapons are becoming less relevant to geopolitics or military affairs. In contrast, they have increased their reliance on nuclear weapons for deterrence as well as defense. Indeed, nuclear forces represent an important asymmetric military capability for nullifying their nonnuclear disadvantages.²¹

More importantly, the role of nuclear weapons in these three states’ strategies has become more nuanced and expansive as a result of their assessment of potential future armed conflicts. These actors believe a constant state of competition exists with the United States that explicitly includes a nuclear dimension that extends across multiple strategic domains and across different phases of crisis and conflict. Thus, nuclear forces not only deter the most extreme circumstance (large-scale nuclear attack against their homelands) but also are increasingly expected to play a foundational and active role across all phases of crisis and conflict.²² They ostensibly go well beyond views of nuclear deterrence and prevention of nuclear war, to include the potential for war fighting.²³

Indeed, North Korea and Russia (and to some extent China) have been explicit about their readiness for nuclear use or employment. For example, in 2017 North Korea conducted several missile exercises designed to practice engaging US forces deployed in Japan and South Korea. As noted in one press release, “The drill was conducted by limiting the firing range under the simulated conditions of making preemptive strikes at ports and airfields in the operational theater in South Korea where the US imperialists’ nuclear war hardware is to be hurled.”²⁴ The NATO secretary general’s annual report noted in 2013 Russia simulated nuclear strikes against Sweden.²⁵ This came during repeated nuclear threats

from Moscow during its invasion and subsequent annexation of Crimea, Ukraine.²⁶

These states have developed a menu of options for calibrated nuclear use or employment, to include options for rapid and deliberate nuclear escalation.²⁷ These options are increasingly integrated across the spectrum of crisis and conflict, creating a hybrid approach that combines conventional and nuclear forces into a cohesive and flexible approach designed to fight and win potential conflicts with a range of actors, to include the United States and its allies.²⁸ For example, Dave Johnson, a staff officer in the NATO International Staff Defence Policy and Planning Division, explained, “Russia has integrated inherently flexible nuclear capabilities with conventional precision strike assets into a single strategic weapons set designed to inflict calibrated levels of damage for strategic effect.”²⁹ Indeed, Russia regularly exercises integration between components of its nuclear triad and conventional precision-strike capabilities.³⁰ Moreover, Moscow attempts to cast a nuclear shadow to achieve its political objectives in crises and conflicts short of conventional war, such as its annexation of Crimea or attempts to intimidate NATO members into forgoing missile defense procurements.³¹ China has also sought to integrate its forces. As noted by China security experts Michael Chase and Arthur Chan, Beijing has developed its own integrated strategic deterrence concept that “calls for a comprehensive and coordinated set of strategic deterrence capabilities, including nuclear, conventional, space, and cyber forces.”³² Song Zhongping, a former member of the People’s Liberation Army’s Second Artillery Corps (now PLA Rocket Force), reaffirmed this view, acknowledging China is working to integrate land-, sea-, and air-launched missile systems toward a seamless strike posture encompassing both nuclear and conventional forces. “China has developed many kinds of conventional warhead missiles,” Zhongping says, “from short range to long range, which all can be turned into very powerful nuclear weapons.”³³ During a crisis or conflict, all three states are likely to simultaneously seek to achieve strategic objectives with conventional means while also posturing, exercising, or demonstrating nuclear-capable forces.

Brad Roberts argues that these adversaries have developed a “theory of victory” vis-à-vis the United States that includes preparation for potential nuclear employment to degrade US capability and will to fight.³⁴ Potential adversaries contemplating a theory of victory for contingencies

such as a potential regional armed conflict appear to make three broad assumptions.

First, they appear to believe there are real incentives for the use of nuclear-capable forces for a range of possible operations, up to and potentially including employment at the outset of or early within a regional conflict. These incentives are particularly high if they believe the United States is preparing to launch an immediate attack. Importantly, from their perspective, their use or employment of nuclear forces would, in many cases, represent a form of *defensive* operation, rather than a preemptive, offensive, or highly escalatory form of employment. Within their assessments of past US military operations, all three nuclear-armed potential adversaries have observed the difficulty of combatting a US-led coalition, particularly if the United States is granted time to assemble a major conventional military force. The ruling regimes note that time is rarely on the side of state actors opposing the United States—the longer the conflict, the more likely a US adversary will face an increasingly unfavorable balance of forces. Thus, should an adversary conclude that conflict is likely, US overseas bases, key transportation nodes, and concentrations of US or allied forces may be threatened or struck early to negate US and allied military advantages and create space for negotiation and crisis termination.

Second, potential adversaries seem to view US defense strategy and planning as daunting but also potentially brittle—and thus vulnerable with regard to the networks of capabilities, webs of allied and partner relationships, and multiple communications and transport nodes involved. If key US nodes are held at risk or an important US ally is coerced into sitting out a fight or refuses US access, adversaries may speculate that the operational tempo of US military response will slow or even grind to a halt. This could explain an interest in dual-capable delivery systems of varying ranges that can grant a number of options for threatening regional or theater targets or attacking them outright.

Finally, North Korea, Russia, and China may believe escalation, including nuclear escalation, can be controlled.³⁵ As such, all three nuclear-armed potential adversaries appear to reject the idea that any form of nuclear escalation or employment in a future armed conflict will likely or necessarily lead to thermonuclear Armageddon. In addition, all three states implicitly question whether the United States will view any

form of “limited” nuclear employment within the context of a regional conflict as necessarily triggering a major US nuclear response.

As such, potential adversaries also appear to be differentiating between different levels of conflict (i.e. regional conflicts and those that would involve some form of direct attack against the US homeland). This is not to suggest that within a future regional crisis a potential adversary will not implicitly or explicitly threaten the US homeland; indeed, this might be a critical component of their strategy. But all three states will likely hesitate to wage attacks upon the US homeland for fear this would automatically provoke a significant US response. Instead, they seek strategies and courses of action, to include types of nuclear employment, that would keep an armed conflict within their “home” region and not provoke unwanted escalation. They may believe nuclear employment can be controlled through careful and limited application of force. This could, for example, include actions such as a tactical nuclear attack on naval targets or against an advancing column of ground forces or an atmospheric detonation designed to interfere with aerospace operations. Together these assumptions appear to form a perception that some form of limited, regional employment of nuclear weapons far from US shores may not automatically trigger a US nuclear counterstrike.

These insights also reveal an implicit but central judgment about the US willingness to sustain costs. North Korea, Russia, and China all appear skeptical of the US willingness to endure significant pain and casualties due to a prolonged conflict that is not initiated as a result of a direct attack upon the US homeland. They also question the breadth and depth of the US commitment to a number of its allies and partners and to related US-led regional security arrangements. They view the United States as a superpower and fear that it has hegemonic ambitions but wonder how willing it is to bear the costs of hegemony, particularly on behalf of distant allies and interests and if these costs have the potential to be very high. As such, a hybrid approach that couples conventional military action with nuclear threats or employment may (in their minds) induce the United States and its allies to back down.

None of this suggests that nuclear strategies of potential adversaries are the same or that they seek a nuclear conflict with the United States. Nor should it be assumed that their theater-range dual-use options are always or primarily nuclear options or that they are solely developed with the United States and its allies in mind. But it does reflect a convic-

tion that there are significant incentives for adversaries to consider employing their nuclear forces to achieve political and military objectives, particularly within a future regional crisis or conflict. It also reflects the growing trend to closely tie nuclear-capable forces into strategies and operations that employ conventional and dual-use forces to achieve strategic, theater, and battlefield objectives against the United States and its allies.

Importantly, North Korea, Russia, and China likely calculate that even the threat of nuclear employment could shift the nature of a crisis or conflict, potentially panicking US allies, fracturing US-led coalitions, or causing US decision makers to reevaluate the risks or costs over what may appear to be a regional dispute. Should armed conflict break out, Russia, China, or North Korea may assess that certain forms of limited regional nuclear strikes could peel away US allies unwilling to risk being the possible target of nuclear strikes. Moreover, if an initial, conventional-only conflict yields indecisive or poor outcomes, the threat or employment of theater nuclear forces may also be viewed as an option for attempting to force the United States and its allies to the negotiating table, terminating hostilities before they prevail.

Four recent developments offer evidence of this hybrid conventional-nuclear approach on the part of these potential adversaries. First, all three have revisited or reemphasized the potential utility of nuclear weapons (to include their employment against a highly capable conventional opponent) within their respective military doctrines. Some are more explicit, such as North Korea and Russia, who both openly brandish the nuclear option. China is more opaque, and its growing conventional capabilities make it relatively less reliant on nuclear forces, but its stated “no first use” policy may be less unconditional than it is often presented, and it too has recently significantly elevated the role and importance of its nuclear forces. For example, both China and North Korea have elevated the status of their respective commands responsible for nuclear forces, placing strategic capabilities on the same level as air, sea, and naval forces.³⁶

Second, North Korea, Russia, and China are diversifying and expanding their means of delivering nuclear weapons.³⁷ This includes an emphasis on developing or improving multiple dual-capable missile delivery systems required for various forms of nuclear employment.³⁸

Third, these actors have also taken steps to improve the command-and-control of their nuclear-capable forces, to include emphasizing their

ability to maintain control, execute orders, and carry out operations in the event of a major armed conflict.³⁹

Finally, all three states have conducted tests, exercises, and war games that feature nuclear-capable forces carrying out warfighting operations. For example, both North Korea and Russia have openly exercised nuclear-capable forces carrying out simulated attacks against US and allied targets as well as issuing threats to employ nuclear weapons that appear calculated to intimidate and coerce US allies and partners and perhaps also impact US decision making in the event of a crisis or conflict.⁴⁰ China has also publicly exercised its rocket force under battlefield conditions, to include against an unnamed major power and with rocket force troops practicing to fight through electronic warfare and WMD attacks.⁴¹ Taken together, these developments ensure that within any future crisis or conflict, these forces will be highly capable, implicitly casting a nuclear shadow over the hostilities, and pose deterrence, assurance, and war-fighting challenges to US regional combatant commanders.⁴²

Integrating US Conventional and Nuclear Deterrence Strategies

The above threat represents a strategic challenge requiring enhancements to US deterrence posture. No longer can deterrence be divided between nuclear and nonnuclear subgroupings. The nonnuclear/nuclear hybrid approach employed by potential adversaries necessitates a more comprehensive, cohesive, and mutually supportive approach to deterrence. Senior members of the US defense community have advocated for a renewed emphasis within US defense policy and planning on the critical importance of reintegrating US nuclear-capable forces into military planning to better deter contemporary threats.⁴³ Moreover, a number of scholars and practitioners have analyzed the challenge posed by nuclear-armed potential adversaries attempting to wield these weapons to strain US alliances and challenge US defense plans and concepts. In response, they have sought to develop strategic concepts or policy prescriptions for countering these threats that both reevaluate and better integrate US nuclear-capable forces into US defense and deterrence strategies against current and future threats.⁴⁴ In addition, as noted above, the 2018 *NPR* calls for a better integration of nuclear forces into broader US military planning and operations.⁴⁵

However, integrating US nuclear and nonnuclear forces for the purpose of improving the US ability to deter adversary hybrid challenges faces a number of obstacles. These obstacles are likely to hamper the US ability to deter adversaries who may precipitate crises that do not fit into either a conventional or nuclear box.

Given the complexity and multiple layers of the problem, it is important to unpack the challenges that impede integration before articulating improvements. Nuclear and conventional policy separation developed over time and reflects a combination of factors within the national security policy-making community and the armed forces. For policy makers, these included the following: optimism that nuclear weapons could be rendered taboo or obsolete, a diminished interest in and understanding of nuclear forces, competition with other issues on a crowded US national security docket, concerns about resource constraints within the defense budget, and anxiety and uncertainty over how to best address new and emerging threats.

Nuclear forces and their potential contributions to deterrence and defense were also sidelined within the Department of Defense and armed services. The end of the Cold War and significant reduction in US forward-deployed non-strategic nuclear weapons led regional combatant commanders to increasingly view nuclear deterrence and operations as the responsibility of US Strategic Command (USSTRATCOM) and turned their attention to what they considered more pressing matters. Over time, the service academies and war colleges also reduced nuclear force and deterrence offerings on their curricula, with only a smattering of courses addressing these topics; while some relevant courses have returned to the US military's schoolhouses, the trend remains slow to reverse.⁴⁶ In addition, many war games and tabletop exercises would either deliberately leave the activities or involvement of nuclear-capable forces out of the game or would entirely halt such exercises at the first sign of potential nuclear employment. Finally, the seemingly interminable "War on Terror" consumed significant military leadership and intellectual bandwidth. Nuclear thinking outside the realm of nuclear terrorism remained largely in the background. Although civilian and military leadership repeatedly stated in the years after the end of the Cold War that nuclear forces remained a priority, the US government did little to redress the slow but steady exclusion of nuclear-capable forces from broader defense plans and policies.

All of the above factors sidelined or diminished policy attention on nuclear issues for most of the post-9/11 era and increasingly left nuclear forces detached or absent from the development of strategies to address contemporary security challenges. They also contributed to pushing nuclear deterrence and nuclear strategy to the margins of military education, training, and planning. However, it is increasingly clear this static and stagnant approach is no longer tenable. As stated in the 2018 *NPR*, integrating US nuclear forces into broader US military strategy is vital to US national security.⁴⁷ The integration required to respond to nuclear-armed potential adversaries' hybrid approach to strategy and war fighting will by necessity require significant coordination within plans, capabilities, responsibilities, and authorities to be successful. This will likely require new thinking and strategizing. But the United States also will need to move beyond a posture where nuclear-capable forces are left in the background, only called upon in the direst situations.

All of this is not to suggest the United States should lower its threshold for nuclear employment; rather it is to rethink how to prepare for a conflict with an adversary that will include nuclear and dual-capable forces throughout the entirety of its own campaign planning and will seek to use its nuclear capabilities to intimidate and coerce US allies and partners well before the advent of a crisis or conflict. Even if the nuclear forces of potential adversaries are primarily or solely used for messaging and signaling purposes, the United States must be prepared for its own nuclear-capable forces to carry out deterrence operations—and to possibly continue conducting these operations even as other US forces engage in war fighting.

Theater commanders may, for example, need to juggle the demands of a robust air campaign while at the same time devoting airframes to meet nuclear deterrence and allied assurance requirements. US forces may also need to develop a new and different approach to intra-conflict deterrence, such as sending signals or posturing forces to deter an opponent from bringing tactical nuclear forces to bear in a future battle for the purposes of potential nuclear warfighting. This multi-level challenge—simultaneous conventional war fighting while proactively deterring potential adversary use or employment of WMD for tactical or strategic effect—is only partly addressed in the 2018 *NPR*. Moreover, necessary measures to successfully integrate US forces exist in tension with other current guidance documents, which refer to deterrence as a set of activities

that occurs before armed conflict and the ramping up of major combat operations rather than an activity that might be necessary across all phases of operations.⁴⁸

The end result of this integration will differ theater to theater and adversary to adversary. But in each case the approach should address at least six factors that have stovepiped current US nuclear deterrence strategies, operations, and forces:⁴⁹

1. Separation of Nuclear Forces from Regional Deterrence and Defense Architectures

As noted above, deterring the use or employment of adversary nuclear forces in regional crises, contingencies, or conflicts is of increasing importance. In the future, *any* regional crisis or conflict with a potential adversary such as North Korea, Russia, or China will automatically include a nuclear dimension. Deterrence of nuclear intimidation, coercion, or aggression thus requires the United States to develop strategies and courses of action that deter not just threats to the US homeland, but also explicit nuclear brinkmanship and bellicosity within a specific theater as well, something largely eschewed by most US military planners. Yet deterring adversary nuclear threats or actual escalation during a “conventional” conflict to ensure the United States and its allies can achieve our political-military goals requires closer coordination between conventional and nuclear forces. Indeed, deterrence staffing or planning cannot be separated as a problem for (typically a very limited number of) nuclear planners at regional headquarters and their counterparts at STRATCOM. Instead, US nuclear-capable forces must be directly integrated into all theater war planning.

To be sure, US nuclear-capable forces may not necessarily need to have a visible role within some contingencies. However, they are likely to have some role—however slight—due in no small part to potential adversaries and allies viewing these forces as the most effective counter to nuclear aggression. This requires a coherent and cohesive strategy that encompasses US nuclear-capable forces, to include how the United States can posture, signal, and deploy these forces (whether in the continental US, abroad, or in transit between the two) in a manner that will lead a potential adversary to stand down or otherwise curtail its use of nuclear or dual-capable forces within a crisis or conflict in its own backyard. The goal is to develop and communicate a strategy—and execute

the actions or operations necessary to make this strategy credible—that keeps an adversary’s nuclear forces in garrison or otherwise viewed as a zero or net negative within their cost-benefit calculations. The alternative is that these adversary forces will play a role (and potentially a very prominent role) in an unfolding conflict, requiring a US commander to devote precious, and likely scarce, resources to assuring skittish allies and perhaps even to missions devoted to neutralizing or eliminating these adversary assets, which increasingly include mobile units that are difficult to find, fix, track, and destroy.

2. Separation of Capabilities

Closely tied with integrating nuclear forces with regional forces and plans is how to synchronize and de-conflict dual-capable systems and supporting assets needed to implement regional deterrence architectures (i.e. the tactical component to integration at the regional/theater level). Indeed, future nuclear deterrence operations in a regional contingency could bring competing priorities with nonnuclear assets into direct conflict. For example, to quickly send a bomber assurance and deterrence mission to a specific region or theater, the United States may need to rapidly generate a bomber or bombers supported by tanker aircraft and other assets. Depending on the circumstances, the requirements of this mission might be simultaneously competing with requirements for other missions in this or other theaters, all of which may rely on the same fleets of aircraft. As such, future nuclear deterrence operations and courses of action will need to match US nuclear and conventional needs with capabilities in a manner that, whenever and wherever possible, is complementary and mutually supportive, potentially requiring significant coordination meticulously planned in advance.

3. Separation of Nuclear Forces and Nuclear Deterrence from Certain Phases of Conflict

At present, there is a general assumption within the United States that nuclear deterrence is either restricted, or most relevant, to either the earliest or latest phases on the spectrum of peace and armed conflict. Within Joint Staff guidance documents such as *Joint Operations*, “deterrence” concepts or operations are important in pre-conflict phases but are either suspended or take a back seat to war fighting upon the initiation of hostilities.⁵⁰ In this view, deterrence—and particularly nuclear deterrence—is largely absent from consideration as fighting grows more

intense, returning to prominence only when necessary to deter potential nuclear employment by an adversary. A second and closely related assumption is that adversary nuclear employment is unlikely to occur during the onset of a conflict and will not occur without some form of signal or other indication that an adversary is prepared to escalate up to nuclear employment.

Yet this approach has two important challenges given the analysis of potential adversary strategizing and organizing, training, and equipping of nuclear-capable forces, described above. First, potential adversaries may have strong incentives to use or consider employing their nuclear forces early in, or even at the onset of, a conflict. As a result, courses of action for the purposes of deterring adversary use or employment of nuclear forces should not be restricted to the beginning or end of crises or conflicts and may represent a requirement across all phases. Second, this guidance overlooks the challenge of intra-conflict deterrence. Indeed, over the last two decades, policy makers have done little in terms of thinking or practicing with regard to the challenge of how to signal (whether through posturing or moving forces, or in terms of media messaging or leadership communications) for the purposes of deterrence during a future conflict with a nuclear-armed power. The question of how to deter a nuclear-armed adversary from escalating up to and over the nuclear threshold is too important to wait until an actual shooting war starts—indeed, at that point, it is far too late to prevent aggression. The solution likely involves coordinating military movements and actions with sustained communication and disciplined messaging to multiple actors, to *include* the adversary. But communication with competitors and potential adversaries is often fraught even in peacetime. This and other elements of intra-conflict deterrence remain understudied, little practiced, and poorly understood outside of Omaha and parts of the Pentagon, which could raise serious issues and challenges in a future crisis.

4. Separation of Planning

Planning and executing nuclear deterrence operations while simultaneously managing a crisis or engaging in war fighting will be difficult for a commander during a period of high tension or within the heat of battle. These plans require contemporary development and integration to be effective and compatible during a future crisis or conflict with a nuclear-armed adversary. But as with other aspects of nuclear strategy

and operations, “nuclear” plans (and planners) are often separated from “conventional” forces. This problem applies beyond nuclear-capable forces, as planning for other operations (such as counter-WMD operations or application of high-end special operations teams for critically important targets) is similarly often kept separate from other plans. All of the above are problematic for attempting to prepare to outmaneuver and outfight a nuclear-armed adversary. Forces well prepared to quickly and effectively execute operations that may include conventional, nuclear-capable, or potentially highly specialized teams of special operators will require a great deal of advance planning and coordination to neutralize or eliminate nuclear threats.

5. Separation of Responsibilities

Who has the primary responsibility for deterring nuclear intimidation, coercion, and aggression when the implicit or explicit threats involved are not directed against the US homeland? USSTRATCOM is the integrator and synchronizer with regard to deterring or combatting strategic threats and when US strategic assets are involved. Potential adversaries, however, may view considerable utility in keeping their use of nuclear forces at a substrategic or tactical level. If an adversary is weighing regional or tactical nuclear use or employment, effective nuclear deterrence requires coordinated actions led principally by the regional combatant commander, along with the USSTRATCOM commander and the president.⁵¹ Prior to the 2018 *NPR*, however, there was limited and sporadic attention in several combatant commands to addressing the question of how US nuclear-capable forces should play a role in regional crises and contingencies involving potential adversaries that had retooled and bolstered their nuclear forces to put pressure on US-led regional security architectures and challenge US regional defense plans. Thus, this form of integration requires combatant commanders and their subordinate commanders who may be threatened or attacked by adversary nuclear forces to review and if necessary revise their plans, in coordination with the National Command Authority, USSTRATCOM, and the services (in their capacity as force providers) to ensure all parties concerned are synchronized in acting to forestall adversary nuclear brinkmanship and de-escalate nuclear crises. As these strategies, and the actions necessary to implement them, may require force deployments, force signaling, regional engagements, and high-level communications,

some or all of which may be occurring at the same time, discussion and coordination pre-crisis is imperative.

6. Separation of Domains

US policy makers and strategists have wrestled with various descriptions of deterrence that try to address the fact that the United States faces challenges and competitors across numerous strategic domains. How should the United States posture and operate its forces to deter adversaries across air, land, sea, space, and cyberspace? Differing definitions of the phenomenon, differing opinions on how to characterize this form of deterrence, and a host of differing authorities and responsibilities across the national security community for addressing these challenges have complicated US efforts to develop and implement a deterrence strategy that can span across domains.

Potential adversaries, however, appear to have done so already. In their view, the United States operates with impunity across strategic domains, to include planning attacks on their nuclear forces, which skews nuclear deterrence and escalation dynamics for these actors. Adversaries may jump to the conclusion during a crisis, for example, that the US has rejected or subverted the concept of nuclear deterrence and is preparing to preemptively attack. They may also “hopscotch” across domains, interpreting US actions in space or cyberspace as representing the spearhead of an attack on their nuclear deterrent force—and thus responding with courses of action focused on nuclear forces even when the United States has done nothing in terms of its own nuclear posture.

Regardless of the overall US deterrence strategy for deterring potential adversaries across these strategic domains, it is important for US policy makers and commanders to understand that adversaries may have already collapsed them. US actions, to include conventional force movements, missile defense deployments, exercises, or activities in space or cyberspace, are already informing adversary decisions with regard to nuclear force development and deployment and may also inform their future cost-benefit calculations with regard to using or employing their nuclear forces.

Integrating Deterrence: A Way Ahead

This article views the increasing commitment of potential adversaries to nuclear forces—and closely related efforts to integrate their nuclear

and nonnuclear forces for the purpose of challenging the United States across multiple strategic domains and phases of conflict—as a significant, pressing challenge to the US and its allies. Within this environment, successful deterrence strategies and operations will require close cooperation between nuclear-capable forces and other types of forces—space, cyber, and conventional—operating in unison rather than isolation. This requires fresh thinking and a new, integrated approach to deterrence that credibly communicates the United States possesses the will and attendant capabilities to impose costs and deny benefits against any adversary seeking to leverage or employ any part of its nuclear arsenal in a conflict or crisis, to include theater-range dual-capable systems and “tactical” nuclear weapons. To be sure, this type of integration is not a panacea for all deficiencies within the US deterrence posture. Rather, closer integration between US nuclear and conventional forces is a much needed early step in posturing to deter and, if deterrence fails, respond to potential adversary hybrid operations.

Four modest steps should be taken to integrate nuclear and nonnuclear forces to better prepare the United States to prevent an adversary from realizing any strategic or tactical advantage through nuclear use across the spectrum of crisis and conflict.

First, geographic combatant commands (GCC), USSTRATCOM, and the National Command Authority (NCA) must enhance their collective efforts on how to react to an escalating conflict that contains a nuclear dimension. This need was referenced in the 2018 *NPR*.⁵² The level of integration required to counter adversary hybrid nuclear strategies that have integrated conventional and unconventional forces requires greater synchronization between Washington, DC; Omaha; and regional and functional combatant commanders to develop the “tailored” strategies called for in the 2006 *Deterrence Operations Joint Operating Concept* and the 2018 *NPR*. In doing so, they can bring together US nuclear-capable and conventional forces in a manner that avoids mirroring and effectively deters opponents from realizing strategic or tactical objectives.⁵³ This necessitates all entities to co-develop and de-conflict campaign planning that explicitly features nuclear weapons, both of the United States and of a potential US adversary, across the spectrum of crisis and conflict. For example, leveraging nuclear or dual-capable military assets to deter adversary attempts at nuclear intimidation, coercion, or employment during a “conventional” campaign, without detracting

from US efforts to prevail within the ongoing conflict, must be better understood and synchronized more thoroughly. This may change some assumptions or objectives in current planning that may not fully take into account deterring, or, if deterrence fails, responding to nuclear use or employment during high-intensity conventional operations. More importantly, this also may mean scaling back certain nonnuclear operations to prevent escalation past the nuclear threshold, something that appears to be less well understood between the NCA, USSTRATCOM, and regional combatant commanders.⁵⁴

Second, geographic and functional combatant commanders and their staffs may need to reexamine and revise current plans to better support the broader conventional and nuclear integration efforts listed above. In the years after the Cold War, the bulk of thinking, planning, and capabilities for deterring adversary nuclear aggression shifted to USSTRATCOM. As such, nuclear deterrence was viewed as solely a USSTRATCOM task; combatant commanders were in the day-to-day business of fighting current enemies, not deterring nuclear attacks from a state adversary, which many considered an abstract and unlikely threat. This perception was reinforced by the removal of many US nuclear and dual-capable platforms from much of Europe and all of Asia, further distancing combatant commanders from the nuclear mission. Unfortunately, regional combatant commanders cannot view nuclear weapons as useless relics or another command's responsibility; several potential adversaries have made their own nuclear arsenals an integral part of their strategies. Consequently, the need to bring nuclear weapons back into the regional deterrence toolkit demands combatant commanders break through many of the stovepipes listed above that impede their ability to bring together conventional and nuclear-capable forces to deter adversary nuclear use or employment.


This effort should underscore the need to raise geographic combatant commander understanding of deterrence concepts and capabilities, and the complexities involved therein. Deterrence is not just about enhancing or reducing the combat power of a certain capability, though this is no doubt an important component. GCCs must understand how communication and other actions can impact credibility and influence an adversary. This may encourage certain actions that, for a period of time, reduce the combat potential of a capability while raising its visibility. For example, a port visit by a nuclear-armed submarine may increase

that system's vulnerability to attack; however, it may also signal to an adversary the seriousness with which the United States takes a crisis or conflict, thereby bolstering deterrence. GCCs will also need to consider what actions intended to bolster deterrence (to include intrawar deterrence) may have the adverse effect and trigger escalation. This requires an in-depth understanding of the potential adversary, its strategic calculus, and possible redlines, to include how the adversary may perceive certain actions or strikes (conventional or nuclear). For example, targeting certain sites may provoke an unwanted response from a potential adversary who may perceive such action as overly aggressive or escalatory. This requires at least some capability for GCCs to plan and think through deterrence challenges, as well as continued support and sustainment of expanding deterrence education for current and future senior leaders.

Third, the Department of Defense should consider reviewing current exercises to ensure they effectively test the ability of nuclear and nonnuclear forces to operate together under the stress of a simulated regional nuclear crisis. The review should encompass both tabletop and actual military exercises and should include testing of command-and-control communications with allies and crisis communication mechanisms and channels with potential adversaries and any other key third parties. The rationale for the review is not that any of these components are not tested, nor that there are doubts regarding the effectiveness of any actor or asset involved. Rather, it would help improve the reintroduction of deterrence and combat operations under the nuclear shadow. Indeed, such reviews, and subsequent exercises, would be to determine whether all these moving parts could work together to protect US and allied interests despite operating under extraordinarily stressful and complex conditions. Should the review deem certain exercises inadequate or uncover seams and gaps, this effort could assist policy makers and commanders in identifying and addressing coordination and integration challenges in advance of a real-world crisis, strengthening integration. Improvements to exercises could include additional tabletop exercises at the highest level of authority, along with regional military exercises that seek to improve US force ability to work cohesively during a nuclear crisis or conflict. This could include exercises that seek to simultaneously coordinate nuclear and conventional operations to strengthen deterrence while also enhancing US conventional forces' ability to fight and win on battlefields that may include nuclear and other forms of

unconventional forces. Understanding and harmonizing nuclear and nonnuclear forces is vital to successful integration and could potentially reduce or eliminate current conventional-nuclear stovepipes while improving the prospects for both conventional and nuclear deterrence.

Finally, the efforts by potential adversaries to hold the US homeland, US overseas bases, and allied homelands at risk suggests that deterring nuclear intimidation, coercion, and attacks may require the development of new concepts and models for better assessing and countering aggression that includes or is spearheaded by an adversary's nuclear forces. How can the United States better calibrate its own efforts at deterrence, which will likely feature a different mix of offensive and defensive forces than those fielded by its prospective opponents? A critically important task for the US national security community is to develop the tools and models that convince adversaries there is no profit in nuclear aggression.

A key challenge facing the United States and its allies is potential US adversaries integrating nuclear-capable forces into their broader political-military strategies, doctrines, and force postures. Despite this challenge, the United States has largely remained static and maintained a divide between the nuclear-capable and conventional forces within its broader military toolkit. The time has come for the United States to reintegrate its nuclear forces back into a broad range of strategies and operations aimed at deterring adversaries from engaging in hostile hybrid or nuclear actions. While modest, the actions proposed in this article will be useful in reducing the challenges that have impeded effective nuclear-conventional integration in the post-Cold War era. 

Notes

1. Department of Defense (DOD), *Nuclear Posture Review (NPR)* (Washington, DC: Office of the Secretary of Defense, February 2018), v, <https://www.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx>.

2. See Defense Intelligence Agency (DIA), *Global Nuclear Landscape 2018*, (Washington, DC: DIA, 2018), vi, https://www.defense.gov/portals/1/features/2018/0218_NPR/img/Global_Nuclear_Landscape_2018_Final.pdf, which notes the trend of several countries, to include potential US adversaries, “developing nuclear weapons with smaller yields, improved precision, and increased range for military or coercive use on the battlefield.” Within this paper, “use” describes a range of actions an actor can take with its nuclear forces below the threshold of actual employment. This can include bellicose rhetoric or threats from leaders or officials;

signaling through force movements, exercises, or war games; as well as tests or other forms of capability improvements.

3. The boundaries of this region can extend beyond borders to include areas that have particular cultural, historical, or religious significance or resonance to a potential adversary and are inextricably linked, in their view, to the defense or well being of their homeland (such as Russia's so called Near-Abroad or the area within China's Nine-Dash Line). In many cases potential adversaries may also believe that, with regard to the area or region in question, a favorable asymmetry of stakes exists between them and the United States.

4. For example, Russia's use of a nuclear-conventional hybrid strategy during its invasion of Crimea caught the United States flat-footed. As noted by Rep. Mac Thornberry, during a 2016 hearing with the House Armed Services Committee, "Russia presents a full spectrum of threats, from a modern nuclear arsenal which Putin has threatened to use against conventional forces, to hybrid tactics based on deception and confusion and little green men. So far, NATO and the U.S. have grappled to find effective countermeasures." Opening statement of Rep. William M "Mac" Thornberry, R-Texas, chairman of the Committee on Armed Services, in *Full Spectrum Security Challenges in Europe and Their Effects on Deterrence and Defense*, 114th Cong., 2nd sess., 25 February 2016, <https://www.gpo.gov/fdsys/pkg/CHRG-114hhrg99629/html/CHRG-114hhrg99629.htm>. More broadly, as noted in the 2018 *NPR*, for much of the post-Cold War era US strategy was developed "amid a more benign nuclear environment and more amicable Great Power relations." DOD, *NPR*, vi. See also testimony by Gen John E. Hyten, commander US Strategic Command (USSTRATCOM), before the Senate Committee on Armed Services on 4 April 2017: "If you look back not just to the 2010 nuclear posture review, but if you look back 20 years—and that is across multiple administrations, multiple Congresses, change of leadership in the military—you see a fundamental de-emphasis of nuclear weapons in our national security strategy. And then look at what our adversaries have done in response to that. I think the assumption would be if we lower the reliance on nuclear weapons and our adversaries do the same thing, they did just the opposite." *Hearing to Receive Testimony on United States Strategic Command Programs*, Senate Armed Services Committee, 115th Cong., 1st sess., Stenographic Transcript, 4 April 2017, 22, <https://www.armed-services.senate.gov/download/?id=C8B6CA1B-A24A-4FF5-9ED0-EE6ED07BD6C7&download=1>.

5. Joint Chiefs of Staff, *Joint Operations* (17 January 2017), xxiii, viii–7.

6. DOD, *NPR*, viii, 21, 37.

7. DOD, Department of Defense, *Deterrence Operations Joint Operating Concept*, ver. 2.0, 2006, 20–25, http://www.jcs.mil/Portals/36/Documents/Doctrine/concepts/joc_deterrence.pdf?ver=2017-12-28-162015-337. For notable academic literature examples on deterrence, see Bernard Brodie, *Strategy in the Missile Age* (Princeton, NJ: Princeton University Press, 1959); Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960); Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966); Robert Jervis, "Deterrence Theory Revisited," *World Politics* 31, no. 2 (January 1979): 289–324, <https://doi.org/10.2307/2009945>; Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1980); and Lawrence Freedman, *Deterrence* (Cambridge, UK: Polity Press, 2004).

8. Some analysts have questioned whether nuclear-armed states such as Russia do indeed consider the early or integrated use of nuclear weapons in their strategic posture. This view generally holds that (1) Russian doctrine does not call for early use of nuclear weapons and (2) recent military exercises do not expressly include simulated nuclear use via "non-strategic nuclear weapons." We disagree with these viewpoints. First, doctrine is poor indicator of a state's

intentions. During a crisis or conflict, nuclear use will be directed by the nation's leader and a handful of trusted individuals. Thus, options ruled out in doctrine maybe presented if viewed as necessary. Second, Russia and North Korea (and to some extent China) clearly think about nuclear weapons differently. Both nations prepare and exercise various nuclear strike options. In some cases, this is via long-range nuclear capabilities; in other cases, it is shorter-range "non-strategic" systems. Finally, we assert an adversary's holistic force posture is the most important indicator of an actor's intentions. As noted above, this includes doctrine, capability, exercises, statements of intent, and leadership perspectives, among other things. In Russia's case, Moscow maintains a capability that spans across the spectrum of nuclear use, from initial employment to large-scale attack. As such, Russia has the ability to select the proper tool for any particular challenge. This is not to say Russia would eagerly cross the nuclear threshold; rather, should the leaders in Moscow decide a nuclear option is necessary, Russia will be well-prepared to do so. For a good discussion on Russian nuclear force posture, see Dave Johnson, "Nuclear Weapons in Russia's Approach to Conflict," *Fondation pour la Recherche Strategique*, no. 6, 2016. For more skeptical views on Russian force posture, see Olga Oliker and Andrey Baklitskiy, "The Nuclear Posture Review and Russian 'De-Escalation': A Dangerous Solution to a Nonexistent Problem," *War on the Rocks* (blog), 20 February 2018, <https://warontherocks.com/2018/02/nuclear-posture-review-russian-de-escalation-dangerous-solution-nonexistent-problem/>; and Bruno Tertrais, "Russia's Nuclear Policy: Worrying for the Wrong Reasons," *Survival* 60, no. 2 (20 March 2018): 30–44, <https://doi.org/10.1080/00396338.2018.1448560>.

9. This quote well known and regularly attributed to Sundarji. However, its original source is uncertain. For a few examples where the quote is used, see Robert Manning, "The Nuclear Age: The Next Chapter," *Foreign Policy*, no. 109 (Winter 1997–1998): 79, <https://www.jstor.org/stable/1149463>; Peter Wilson and Elbridge A. Colby Jr., *Fighting a Nuclear-Armed Regional Opponent: Is Victory Possible?* (Washington, DC: Center for Strategic and Budgetary Assessments, April 2008), ii; and George Perkovich, "If America Topples North Korea and Iran, What Happens Next?," *National Interest*, 17 November 2017, <https://carnegieendowment.org/2017/11/17/if-america-topple-north-korea-and-iran-what-happens-next-pub-74771>.

10. DOD, *NPR*.

11. Cheryl Pellerin, "STRATCOM Commander Describes Challenges of 21st Century Deterrence," *DOD News*, 17 August 2017, <https://www.defense.gov/News/Article/Article/1281946/stratcom-commander-describes-challenges-of-21st-century-deterrence/>.

12. DOD, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2017* (Washington, DC: Office of the Secretary of Defense, 15 May 2017), https://dod.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.pdf; and *Russia Military Power* (Washington, DC: Defense Intelligence Agency, 2017), www.dia.mil/Military-Power-Publications.

13. "We are responding to being encircled by NATO arms and troops. The recent events, which are unfolding in keeping with the NATO Warsaw Summit, involve the deployment of ground forces from NATO countries (incidentally, including Germany) near our borders." Foreign Ministry of Russia, "Foreign Minister Sergey Lavrov's Remarks and Answers to Media Questions at a Joint Press Conference following a Meeting with Vice Chancellor and Federal Minister for Foreign Affairs of the Federal Republic of Germany Sigmar Gabriel, Moscow, March 9, 2017," transcript, 9 March 2017, http://www.mid.ru/en/web/guest/meropriyatiya_s_uchastiem_ministra/-/asset_publisher/xK1BhB2bUjd3/content/id/2669210. Many Chinese strategic thinkers also contend that the United States is seeking to surround or encircle China: "A final set of Chinese concerns . . . center on the way missile

defense cooperation with regional partners tightens and expands U.S. alliances in the region in *what appears to many Chinese to be a network of institutions containing China*. For instance, outspoken PLA Air Force colonel Xu Dai aired this view: ‘China is in a crescent-shaped ring of encirclement. The ring begins in Japan, stretches through nations in the South China Sea to India, and ends in Afghanistan. Washington’s deployment of antimissile systems around China’s periphery forms a crescent-shaped encirclement.’ *These concerns are aired widely*” (emphasis added). Christopher Twomey, *China’s Offensive Missile Forces: Hearings before the US-China Economic and Security Review Commission*, 114th Cong., 1st sess., 1 April 2015, 66, https://www.uscc.gov/sites/default/files/transcripts/April%2001%2C%202015_Hearing%20Transcript_0.pdf.

14. Russian Federation Ministry of Defense, *Russian National Security Strategy*, 31 December 2015.

15. “Spokesman for DPRK Foreign Ministry Slams U.S. Accusations Over its Measures for Bolstering Up Nuclear Deterrent for Self Defense,” KCNA, 20 September 2016.

16. Dmitry Adamsky, “If War Comes Tomorrow’: Russian Thinking about Regional Nuclear Deterrence,” *Journal of Slavic Military Studies* 27, no. 1 (2014): 169, <http://doi.org/ctq3>.

17. Lora Saalman, “Prompt Global Strike: China and the Spear,” Daniel K. Inouye Asia-Pacific Center for Security Studies, April 2014, 3, https://apcss.org/wp-content/uploads/2014/04/APCSS_Saalman_PGS_China_Apr2014.pdf.

18. Alexei G. Arbatov, *The Transformation of Russian Military Doctrine: Lessons Learned from Kosovo and Chechnya*, Marshall Center Papers, no. 2 (Garmisch-Partenkirchen, Germany: George C. Marshall European Center for Security Studies, 2000): 18-19.

19. See examples in James M. Acton, *Silver Bullet? Asking the Right Questions About Conventional Prompt Global Strike* (Washington, DC: Carnegie Endowment for International Peace, 2013).

20. “North Korea Cites Muammar Gaddafi’s Destruction in Nuclear Test Defence,” *Telegraph*, 9 January 2016, <https://www.telegraph.co.uk/news/worldnews/asia/north-korea/12090658/North-Korea-cites-Muammar-Gaddafis-destruction-in-nuclear-test-defence.html>.

21. For more in-depth discussions on potential adversaries evolving nuclear weapons strategies, see John K. Warden, *North Korea’s Nuclear Posture: An Evolving Challenge for U.S. Deterrence*, Proliferation Papers, no. 58 (Paris: Institut Francais des Relations Internationales, March 2017), <https://www.ifri.org/en/publications/etudes-de-lifri/proliferation-papers/north-koreas-nuclear-posture-evolving-challenge-us>; Eric Heginbotham et al., *China’s Evolving Nuclear Deterrent* (Santa Monica, CA: RAND Corporation Press, 2017), https://www.rand.org/pubs/research_reports/RR1628.html; and Johnson, “Nuclear Weapons in Russia’s Approach to Conflict.”

22. For example, see Dmitry Adamsky, *Cross-Domain Coercion: The Current Russian Art of Strategy*, Proliferation Papers, no. 54 (Paris: Institut Francais des Relations Internationales, November 2015), <https://www.ifri.org/en/publications/enotes/proliferation-papers/cross-domain-coercion-current-russian-art-strategy>; and Michael S. Chase and Arthur Chan, *China’s Evolving Approach to “Integrated Strategic Deterrence”* (Santa Monica, CA: RAND Corporation Press, 2016).

23. For some examples on potential nuclear war fighting, see “NDC Spokesman Warns U.S. of Nuclear Counter-Action,” KCNA, 19 June 2016, www.kcna.co.jp/item/2016/201606/news19/20160619-31ee.html; and Damien Sharkov, “Russia Practiced Nuclear Strike on Sweden: NATO Report,” *Newsweek*, 4 February 2016.

24. Quoted in Jeffrey Lewis, “North Korea Is Practicing for Nuclear War,” *Foreign Policy*, 9 March 2017, <https://foreignpolicy.com/2017/03/09/north-korea-is-practicing-for-nuclear-war/>.

25. Jens Stoltenberg, *The Secretary General’s Annual Report 2015* (Brussels, Belgium: North Atlantic Treaty Organization Public Diplomacy Division, 2016), https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_01/20160128_SG_AnnualReport_2015_en.pdf.

26. Jacek Durkalec, *Nuclear-Backed ‘Little Green Men’: Nuclear Messaging in the Ukraine Crisis* (Warsaw, Poland: Polish Institute of International Affairs, July 2015).

27. Nuclear-armed potential adversary force postures (the collective of capabilities, readiness, and training) demonstrate a spectrum of nuclear-capable forces that include, among other things, ballistic and cruise missiles able to range varying distances (short, medium, intermediate, and intercontinental ranges) with flexible payloads. These options provide adversaries flexibility to use or actually employ nuclear-capable forces. For example, see DIA, *Global Nuclear Landscape*.

28. For example, see Adamsky, *Cross-Domain Coercion*; Dave Johnson, “Russia’s Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds,” Livermore Papers on Global Security, no. 3 (Livermore, CA: Lawrence Livermore National Laboratory, February 2018), <https://cgsl.llnl.gov/content/assets/docs/Precision-Strike-Capabilities-report-v3-7.pdf>; Michael S. Chase and Arthur Chan, 2016; Thomas Christensen, “The Meaning of the Nuclear Evolution: China’s Strategic Modernization and U.S.–China Security Relations,” *Journal of Strategic Studies* 35, no. 4 (2012): 447–87, <https://doi.org/10.1080/01402390.2012.714710>; and Elsa B. Kania “China’s Strategic Arsenals in a New Era,” *Bulletin of the Atomic Scientists*, 20 April 2018, <https://thebulletin.org/china%E2%80%99s-strategic-arsenals-new-era11716>.

29. Johnson, “Nuclear Weapons in Russia’s Approach to Conflict,” 70.

30. “Recent Drills Demonstrate High Combat Readiness of Russia’s Strategic Nuclear Forces, TASS, 2 November 2015, <http://tass.com/defense/833689>.

31. Durkalec, “Nuclear-Backed ‘Little Green Men’”; and Adamsky, *Cross-Domain Coercion*.

32. Chase and Chan, *China’s Evolving Approach*, iii.

33. “China Needs More Nuclear Warheads to Deter US Threat, Military Says,” *South China Morning Post*, 30 January 2018, <https://www.scmp.com/news/china/diplomacy-defence/article/2131261/china-needs-more-nuclear-warheads-deter-us-threat>.

34. See Brad Roberts, *The Case for U.S. Nuclear Weapons in the 21st Century* (Stanford, CA: Stanford University Press, 2016): 245.

35. For example, Chinese military analysts describe China’s “Nuclear Counterattack Campaign” in escalation control terms, noting strikes should be crafted to achieve objectives and terminate a nuclear war. Similarly, Russian analysts note that Russia can inflict “tailored damage” that does not provoke unwanted escalation after nuclear employment. For both Russia and China—and presumably North Korea—the inherent assumption is that an appropriate amount of damage can be tailored to an opponent to achieve their objectives and prevent escalation after nuclear employment. See Michael Chase, Andrew Erickson, and Christopher Yeaw, “The Future of Chinese Nuclear Policy and Strategy,” in *Strategy in the Second Nuclear Age*, ed. Toshi Yoshihara and James R. Holmes (Washington, DC: Georgetown University Press, 2012); and Nikolai N. Sokov, “Why Russia Calls a Limited Nuclear Strike ‘De-Escalation,’” *Bulletin of the Atomic Scientists*, 13 March 2014, <https://thebulletin.org/why-russia-calls-limited-nuclear-strike-de-escalation>.

36. DOD, *Annual Report to Congress*, 28; Xinhua, “China Inaugurates PLA Rocket Force as Military Reform Deepens,” 1 January 2016, <http://www.xinhuanet.com/english/2016>

-01/01/c_134970564.htm; and “Law on Consolidating Position of Nuclear Weapons State,” KCNA, 1 April 2013.

37. DIA, *Global Nuclear Landscape 2018*, vi.

38. DOD, *Annual Report to Congress*, 8; DOD, *Military and Security Developments Involving the Democratic People’s Republic of Korea*, 13-14; and National Air and Space Intelligence Center (NASIC), *Ballistic and Cruise Missile Threat*, 2017, http://www.nasic.af.mil/Portals/19/images/Fact%20Sheet%20Images/2017%20Ballistic%20and%20Cruise%20Missile%20Threat_Final_small.pdf?ver=2017-07-21-083234-343. “According to the U.S. Department of Defense, China possesses up to 1,800 theater-range land-based ballistic and cruise missiles, most of which are mounted on road-mobile transporter-erector-launchers and are thus capable of hiding and relocating in China’s complex terrain. The revolution in missile and sensor technology has greatly increased the accuracy of ballistic and cruise missiles and lowered the relative cost of these munitions. Finally, China is assembling a multi-dimensional sensor, command, and communications network that by next decade should allow it to effectively employ the platforms and munitions in its inventory.” China’s Offensive Missile Forces, Prepared Statement by Robert Haddick, *Hearing before the U.S. China Economic and Security Review Commission*, 114th Cong., 1st sess., 1 April 2015, 108, https://www.uscc.gov/sites/default/files/transcripts/April%2001%2C%202015_Hearing%20Transcript_0.pdf. While not all of these missiles are necessarily dual-capable, many are either dual-capable or resemble dual-capable systems. In addition, NASIC’s 2017 report notes: “China continues to deploy nuclear-armed medium-range ballistic missiles to maintain regional nuclear deterrence, and its long-term, comprehensive military modernization is improving the capability of its conventionally-armed ballistic missile force to conduct high intensity, regional military operations, including “anti-access and area denial” (A2/AD) operations.” *Ballistic and Cruise Missile Threat*, 22.

39. Andrew Roth, “Vladimir Putin’s Massive, Triple-Decker War Room Revealed,” *Washington Post*, 21 November 2015, https://www.washingtonpost.com/news/worldviews/wp/2015/11/21/vladimir-putins-massive-triple-decker-war-room-revealed/?utm_term=.a21c77dff196; CGTN, “China’s Rocket Force Conducts First Drill of New Year,” 3 January 2016, <https://www.youtube.com/watch?v=RLq9raPMwDo>; CGTN, “PLA Rocket Force Brigade Holds Night Combat Drill,” 18 April 2018, <https://www.youtube.com/watch?v=LeOeHJN5RsM>; and KCNA, “Kim Jong Un Supervises Test-fire of Ballistic Missile,” 22 May 2017.

40. Vladimir Putin, Presidential Address to the Federal Assembly, 1 March 2018, <http://en.kremlin.ru/events/president/news/56957>. The address, which featured a number of visual graphics and video and computer animation clips, included a computer animation of a simulated ballistic missile strike on Florida (indeed, the part of Florida where Mar-a-Lago is located). See also Stoltenberg, *Secretary General’s Annual Report*, 19; and Motoko Rich, “North Korea Launch Could Be Test of New Attack Strategy, Japan Analysts Say,” *New York Times*, 6 March 2017, <https://www.nytimes.com/2017/03/06/world/asia/north-korea-missiles-japan.html>.

41. “China’s ‘Rocket Force’ Conducts First Drill of New Year,” CGTN, 3 January 2016, <https://www.youtube.com/watch?v=RLq9raPMwDo>. Within the clip, the opponent is described as a “permanent enemy, the Blue Team, a specialized IT troop that posed trouble through electromagnetic waves.” See also “PLA Rocket Force brigade holds night combat drill,” CGTN, 18 April 2018, <https://www.youtube.com/watch?v=LeOeHJN5RsM>.

42. For example, consider a scenario where on the eve of crisis an adversary disperses a number of dual-capable intermediate-range mobile ballistic missiles. If the United States is uncertain of whether they are armed with conventional or nuclear warheads, a US commander may hesitate to attack these systems (and thus potentially escalate a “conventional”

crisis or conflict into a nuclear crisis or conflict) even though they pose a direct and strategically significant risk to a deployed task force, forward bases, or key transport/resupply nodes.

43. DOD, “Remarks by Secretary Carter to Troops at Minot Air Force Base, North Dakota,” 26 September 2016, <http://www.defense.gov/News/Transcripts/Transcript-View/Article/956079/remarks-by-secretary-carter-to-troops-at-minot-air-force-base-north-dakota>; Robert Scher, Statement before the Senate Armed Services Subcommittee on Strategic Forces, 9 February 2016, 3, http://www.armed-services.senate.gov/imo/media/doc/Scher_02-09-16.pdf; and David Trachtenberg and John Hyten, “Nuclear Posture Review Conference,” National Defense University, 16 February 2018, <https://www.c-span.org/video/?441268-2/nuclear-posture-review-part-1>.

44. Vincent A. Manzo, “After the First Shots: Managing Escalation in Northeast Asia,” *Joint Force Quarterly* 77 (April 2017), <http://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-77/Article/581877/after-the-first-shots-managing-escalation-in-northeast-asia/>; Keith Payne, John S. Foster Jr., Kathleen Bailey, Kevin Chilton, Elbridge Colby, Matthew Costlow, et al, *A New Nuclear Review for a New Age* (Fairfax, VA: National Institute Press, 2017), <http://www.nipp.org/wp-content/uploads/2017/06/A-New-Nuclear-Review-final.pdf>; Keith Payne, “New Threat Realities and Deterrence Requirements,” National Institute for Public Policy Information Series, no. 415, 30 January 2017, <http://www.nipp.org/wp-content/uploads/2017/01/IS-415.pdf>; Vincent Manzo and Aaron R. Miles, “The Logic of Integrating Conventional and Nuclear Planning,” *Arms Control Today*, November 2016, https://www.armscontrol.org/ACT/2016_11/Features/The-Logic-of-Integrating-Conventional-and-Nuclear-Planning; Brad Roberts, *Extended Deterrence and Strategic Stability in Northeast Asia*, Visiting Scholar Paper Series, no. 1 (Tokyo: National Institute for Defense Studies, 9 August 2013), <http://www.nids.mod.go.jp/english/publication/visiting/pdf/01.pdf>; Elaine Bunn, “Can Deterrence be Tailored?,” *Strategic Forum* no. 225, National Defense University Institute for National Strategic Studies; and Elbridge Colby and Burgess Laird, “Managing Escalation and Limiting War to Achieve National Objectives in a Conflict in the Western Pacific,” CNAS Paper, August 2016, <http://hdl.handle.net/10945/49800>.

45. DOD, *NPR*, viii, 21, 36, 57, 58.

46. This is not to say there have not been important improvements. The 2018 Nuclear Posture Review brought with it a renewed focus on nuclear deterrence in professional military education. However, shortfalls in curriculum dedicated to deterrence remain. Often nuclear deterrence is captured in only a handful of electives (if offered) or implicitly woven into broader course lessons; as such, deterrence education for the majority of officers across the services continues to fall short of developing comprehensive knowledge of either the role of US nuclear forces in deterrence or the deterrence and allied assurance challenges posed by adversary nuclear forces and hybrid nuclear-conventional forces. See Paul I. Bernstein, “Deterrence in Professional Military Education,” *Air and Space Power Journal* 29, no. 4 (July-August 2015): 84–88, https://www.airuniversity.af.mil/Portals/10/ASPJ/journals/Volume-29_Issue-4/C-Bernstein.pdf.

47. DOD, *NPR*, 21. “U.S. forces will ensure their ability to integrate nuclear and non-nuclear military planning and operations. Combatant Commands and Service components will be organized and resourced for this mission, and will plan, train, and exercise to integrate U.S. nuclear and non-nuclear forces and operate in the face of adversary nuclear threats and attacks.”

48. See, for example, figure VI-1, “The Conflict Continuum” in *Joint Operations*. Joint Publication 3-0, *Joint Operations*, 17 January 2017: vi–2.

49. We note that there are likely more areas of separation that must be removed for full integration. However, this approach is more detailed and concrete—and thus more helpful—than

previous attempts to define integration requirements, which often simply describe a divide between conventional and nuclear forces.

50. See, for example, the following description of “The Instruments of National Power and the Conflict Continuum” within the Executive Summary of *Joint Operations*: “The potential range of military activities and operations extends from military engagement, security cooperation, and *deterrence in times of relative peace* up through major operations and campaigns that typically involve large-scale combat” (emphasis added). *Joint Operations*, x.

51. For example, an integrated response by these three actors during a crisis could include the joint force commander deploying sea assets armed with cruise missiles, fifth-generation aircraft, and persistent intelligence, surveillance, and reconnaissance to the area, providing stealth and standoff strike capabilities (and enablers) that can find and destroy these forces. Further, the USSTRATCOM commander could announce that B-2s will provide “continuous coverage” of the area for the duration of the crisis. The president could issue a statement that any form of nuclear employment against US or allied forces abroad or afloat will be considered a “nuclear attack against the United States,” will prompt a “devastating response” against the adversary, and that adversary political and military leaders “at the highest levels” will be held responsible.

52. DOD, *NPR*, viii.

53. DOD, *NPR*, 25–27; and DOD, *Deterrence Operations Joint Operating Concept*, 44.

54. See Keir A. Lieber and Daryl G. Press, “Preventing Escalation During Conventional Wars,” Project on Advanced Systems and Concepts for Countering WMD (PASCC), Naval Postgraduate School, February 2015.

Expectations of Cyber Deterrence

Martin C. Libicki

Abstract

Cyber capabilities and national attitudes toward their use continue to evolve. As long as other countries understand that the United States is capable of impressive cyberspace operations, then the threat that it will use them in reprisal is inevitably part of the US deterrence package. The policy question is whether the United States should emphasize the possibility by impressing adversaries with what cyberattacks can do, reminding adversaries that the United States would be willing to do it, and investing in making cyberattacks more reliable and even more painful. Two factors, though, vitiate cyberattack as part of an overall deterrence menu—especially compared to similar kinetic threats. One is the difficulty of finding acts we wish to deter against for which a cyberattack is a just-right response: neither too weak nor too harsh. The other is the great uncertainty associated with cyberattack and thus the great difficulty of making the threat dissuasive.

* * * * *

While the United States may seem peerless when measured in terms of its military, economic, financial, or cultural power, this does not prevent other countries from challenging US interests. If this is to change, the United States must be ready and willing to impose costs on those who work against those interests.¹ Such is the theory behind deterrence by punishment.² Clearly, the United States has the means to impose costs; the challenge is to develop a strategy that persuades other nations and actors that the United States can and will impose costs effectively and assuredly.

Martin C. Libicki is the Maryellen and Dick Keyser Distinguished Visiting Professor at the US Naval Academy's Center for Cybersecurity Studies and author of *Cyberspace in Peace and War*. His research has focused on the impact of information technology on domestic and national security. Previously, he worked for RAND (where he is still adjunct), the National Defense University, and the Navy staff. He holds a master's degree and a doctorate from the University of California–Berkeley.

In the last decade a new way of imposing costs has emerged through cyberspace, notably by cyberattacks on information systems. Cyber capabilities and national attitudes toward their use continue to evolve. What was deemed fantastical or science fictional 10 years ago now gets serious attention. Past assessments that “they couldn’t do that” or “they wouldn’t do that” are proving unreliable guides for assessing which capabilities may be used in the future. Many countries, not least of which the United States, can hurt other countries through cyberattacks as well as cyberespionage, cyber sabotage, or cyber subversion. Arguably, this additional capability should therefore add to the deterrence posture of its possessors—but in what way and by how much? This article argues that cyber capabilities can make a contribution to the broader deterrence framework. It seeks to establish a reasonable set of expectations that should inform where the *existence* of cyber capabilities, coupled with the threat they might be used as punishment, may help deter others. While additional capability to punish should improve the ability to deter, two factors vitiate cyberattack as part of an overall deterrence menu. The first is the existence of a deterrence scale associated with the response to a particular bad act, below which any particular reprisal threat may be too weak and above which any particular reprisal threat may be too costly or noncredible. Second, the consequences of suffering a retaliatory cyberattack are so uncertain that they are easy for opposing leaders to deprecate.

The requirements for reasonable and well-communicated thresholds as well as for credibility have been part of deterrence theory since its inception. Furthermore, the notion that certain types of punishment cannot be credibly threatened if they are disproportionate to the crime has been well understood in the literature on nuclear deterrence.³ The difference here is that using cyberattacks for punishment raises issues whose considerations are not so salient in other domains.

To be clear, the focus here is on those cyberattacks that are punitive rather than carried out to support kinetic operations, largely because the contribution of a cyberattack capability to an overall kinetic *reprisal* capability is usually indirect. To illustrate as much, assume US airpower is a tool of reprisal against aggressive actions. The potential *aggressor* may conclude that it may suffer an air raid in response; it is therefore discouraged from aggression. If the aggressor could nullify the air threat because of its own air defenses, such leaders would be emboldened—that is, until their own cyber warriors caution that US cyberattack capabilities can

nullify the aggressor's air defenses. Thus, because of cyberspace capabilities, a US air raid is more likely to succeed and its prospect is thus more likely to deter the aggressor. Here is a case where a cyberattack capability *within* the context of kinetic operations can add to deterrence. But, as the story suggests, it is a second- or third-order consideration and, for that reason, unlikely to factor strongly into the other side's decision making.

As for the deterrent value of an unaccompanied cyberattack threat against another country's military, it would seem to matter only if such a military is at war or is expected to be at war before the effects of any cyberattack can be eliminated; otherwise, a disruptive cyberattack threat against an idle military leaves little for its owner to fear. Also, in fairness, specific reprisal actions need not be explicitly threatened to contribute to deterrence. The president need not say "if you do this, we will take down your power grid." It suffices that another country understands that acting in a particular way will anger the United States and that, in its anger, the United States might use any of many instruments of reprisal. If a country is more inhibited because these instruments *now* include cyberattack, then cyberattack capabilities can be said to contribute to deterrence.

A Deterrence Scale

Deterrence by punishment must satisfy at least two criteria. On the one hand, the threatened punishment must be sufficiently painful that potential attackers believe they will be worse off after punishment has been delivered even after factoring in the benefit from the bad act. On the other hand, the threat of punishment must be credible; having the requisite capability means nothing if the other side thinks it will not be used. Therein lies the dilemma. Some threatened reprisals may be perceived as too disproportionately harsh to be credible. Others may be too small to merit notice on their own or too limited to add appreciably to the deterrent effect of other larger reprisals—for example, a cyberattack simultaneous with a kinetic attack. In other words, for every action there is a just-right deterrence range of reprisals: large enough to be effective but small enough to credibly threaten. Conversely, for every reprisal there is a corresponding range of actions that can be deterred by it.

Consider the risks to credibility of threatening a disproportionate response. If the potential aggressor is powerful, it could counter-retaliate, perhaps even in an escalatory manner. In evaluating the credibility of

a US reprisal threat, the aggressor could ask itself whether the United States would still retaliate even in the face of a possible counter-retaliation. If confident that a counter-retaliation would make a difference, an aggressor is likely to present as daunting—that is, painful and credible—a counter-threat as possible. Furthermore, if it believed that its counter-threat had registered with the United States, the aggressor would deem a disproportionately large reprisal threat from the United States as simply *not* credible because the United States would hesitate to get into a large tit-for-tat to make its point. But the US might be willing to get into a smaller tit-for-tat to preserve its credibility, particularly with third parties it would like to deter. In other words, the US threat to use a large cyber-attack to punish a small misdeed could be discounted; it would provide scant deterrence.

Deterrence calculations necessarily presume a high order of rationality and calculability. When the subject is cyberspace, it also requires a mind-set capable of inferring effects and costs from threatened cyberattacks. Those being deterred may well impute some rationality and a set of reasonable objectives to the United States and thereby figure that the United States will abjure using a capability if using it is costly or risky.

That noted, for some leaders, such rationality (as well as a well-grounded confidence in its assessment of the United States) may be asking a lot. Leaders tend to mirror potential adversaries. Someone whose perspective sees aggression as a country's self-expression, for instance, may not necessarily believe that the United States uses a rationality that would be foreign to the aggressor, itself. One important reason why Iran settled with Iraq in 1988 to end their eight-year war was that its leaders saw the shoot down of the Iranian airliner as prelude to US lethal and pro-Iraq intervention (rather than the mistake it was).⁴ In this particular case, the use of a weapon that the United States might deem overkill may be exactly what the other side would have used were tables turned. That noted, if, given the opportunity and the United States fails to use a retaliatory capability that the aggressor would have used were it available, the assessments of aggressors are likely to be adjusted toward realism. The more such foregone opportunities, the more realism.⁵

An additional barrier to translating a cyberspace capability into deterrence is whether or not others conclude that the US would actually use cyberattacks as reprisals. True, the United States is presumed to have employed Stuxnet and may have used similar capabilities to retard the

Democratic People's Republic of Korea (DPRK) missile program.⁶ Yet in both cases, the United States did not take credit for doing so, something it might have done if such acts were consciously meant to be part of a deterrence package. Attribution is something a country might have wanted if it was hoping to leverage such capabilities for deterrence. The United States may also have used cyber operations to respond to the DPRK Sony hack or Russia's Democratic National Committee (DNC) hack, but there is no public indication of this actually happening (which does not prove the US did nothing). The United States has yet to carry out overt cyberattacks in response to any insult or injury, to cyberspace or otherwise. By contrast, one would expect that if cyberattacks *were* used for reprisals, the United States *would* own up to them. But the United States may be unique in its reticence. China, for its part, has carried out or at least condoned low-level cyberattacks as retaliatory responses. It fired its "Great Cannon" at Github when the latter provided a path for people inside China to access the *New York Times*.⁷ The Chinese government has condoned its hackers defacing the website of a South Korean firm (Lotte) in response to that country's acceptance of a Thaad missile defense system.⁸ The North Korean cyberattack on Sony was carried out presumably in retaliation for the imminent release of Sony's movie *The Interview*. Iran almost certainly retaliated with distributed denial-of-service (DDOS) attacks against US banks for what it believed to be the US sponsorship of Stuxnet—but it also carried out cyberattacks on energy companies of Saudi Arabia (Saudi Aramco) and even Qatar (Ras-Gas) with no single specific Saudi provocation or any discernable Qatari provocation. Russia has also carried out doxing-motivated cyberespionage (DNC, World Anti-Doping Agency, Soros Foundation), DDOS attacks on multiple countries (Estonia, Georgia, Lithuania, Kyrgyzstan, Ukraine), and cyberattacks against electric power (Ukraine).

Another inhibition to the US use of a cyberattack is the precedent that doing so may set for others. In contrast to every other country, the United States has traditionally seen itself as a global leader whose actions are the gold standard by which another country will judge its own actions—or at least its ability to justify its own actions. Of course, if all plausible others have already crossed that threshold, and particularly if that fact were widely acknowledged, there may be no precedent to set, no inhibition to using cyberattack capabilities, and no basis for the United States to justify its diffidence in using cyberattack for retaliation. Some

might argue that the widespread association of the United States with Stuxnet may mean that Rubicon has long been crossed even if Stuxnet were not itself a reprisal and even if the United States has not admitted authorship of it.

Nevertheless, many of the cyberattack capabilities putatively possessed by the United States may be those it said it will not use in peacetime and thus cannot be used for deterrence outside a setting in which warlike operations are also taking place. The United States has signed on to the UN's Group of Government Experts (GGE) convention that abjures cyberattacks on critical infrastructure⁹—and many of the targets of a reprisal cyberattack can be classified thusly. This promise could limit what the United States can threaten in any situation short of armed conflict. And in situations of armed conflict, the expectation of additional pain created by a cyberattack may be too modest to weigh heavily in the deliberations of the potential aggressor. Again, that noted, other countries may not necessarily rest easy by relying on US promises to limit US behavior. If they themselves give such norms no more than lip service, they may see the United States acting similarly, either violating the norm outright, deeming something a war-level cyberattack, or operating covertly so as not to take responsibility. If so, a cyberattack may be a credible reprisal threat even where kinetic response is not.

Can a cyberattack capability add punch to other retaliatory capabilities? This is unlikely if the “other” threat is nuclear, territorial occupation, or an air campaign (although, in the latter case, it depends on how thorough an air campaign). A cyberattack may pale beside what NATO did to Serbia in 1999 but might stand out beside a single cruise missile strike (e.g., such as that against Sudan in 1998). Similarly, since the damage from cyberattacks is largely denominated in dollars rather than lives, it may line up with a full-fledged blockade or even an embargo, but prospects of the latter, if serious, are likely to dominate the other side's calculations. If potential aggressors are already under embargo, they may feel cut off from the United States and thereby discount the threat from cyberspace operations that require connectivity to be implanted or activated—and it may not matter that their optimism is belied by the many ways cyberattacks can get into a system that lack obvious connectivity.

Not everything about the deterrence threshold casts doubt on the value of a cyberattack capability as a deterrent, in large part because retaliation is not homogeneous. Cyberattacks are high among retaliatory

options that can be targeted at leadership without affecting the average person very much.¹⁰ Leaders can be hurt without creating so much public pain as to be judged a disproportionate response. Leaders would pay the cost of their aggression, but they could well lack the evidence, hence the basis for a narrative, to justify their counter-response. Third parties may simply not believe that leaders have been hit unduly or unfairly. Leaders who fear as much may persuade themselves that targets of their aggression can credibly retaliate without the concerns other equally painful—but public and unambiguous—reprisals would raise. It is not necessary that their conclusions be warranted, only that they be plausible. Conversely, many of the more effective cyberspace operations, such as emptying a dictator's foreign bank account, may harm third parties such as the bank itself more than the dictator and thus make poor reprisal options.

Finally, adding even usable arrows to country's reprisal quiver is not always helpful. A potential aggressor facing a contingent risk of a US reprisal may nevertheless discount many of these reprisal options: some because they are too weak to matter and others because they present too many downsides for the United States. Assume, then, a new arrow is added. The other side may be more deterred because the United States now has another usable option—or even better, that the United States has one usable option to respond to a bad act before which it had no way to respond. But the opposite could be true. The other side could conclude that the existence of a cyberattack option *reduces* the odds of having to face a more forceful option. Indeed, the insistence with which the United States brandishes a cyberattack option may convince potential aggressors that threats by the United States to use costlier and/or riskier options are edging off the table. In that case, raising the credibility of one retaliation option would lower the likelihood of more painful ones. The substitution of something that *might* be painful for something that *would* be painful may *reduce* the overall deterrence posture.

Insofar as retaliation should bear some relationship to the transgression—the whole point of the deterrence scale—it may be hard to create an explainable equivalence between the initial event and the reprisal if the former takes place in the physical world and the latter takes place in the virtual world. When the potential of cyberattack has been likened to nuclear attack *and* where cyberattacks, as oft observed, have yet to kill anyone, making a credible case for equivalence *beforehand* is fraught.

And although it is explicitly not US policy that the response to an attack in one domain is a reprisal in another, it should be fairly clear that the only form of aggression for which the deterrence scale is not a major problem is a cyberattack itself. Unfortunately, the difficulties of any deterrence policy to govern the wilds of cyberspace are many.¹¹

In practice, countries rarely lay out a specific set of options as part of their deterrence policy. At best, they may indicate what actions they would take issue with and perhaps point to capabilities they think others are unaware of or not paying enough attention to, as Pres. Barack Obama did with US cyberattack capabilities.¹² Doing so lets others draw their own inferences and calculate their own risks from aggression. What they conclude may be very different from what the United States wants them to conclude.

Does the Uncertainty of Effects Matter?

Uncertainty affects all form of warfare—but with kinetic weaponry others have a good idea what an individual weapon can do, how vulnerable its assets are to attack, what the United States has, and what defenses it has to counter US weapons. With physical attack, the cost of recovery is also predictable in that it is largely based on the cost of replacing destroyed items. However, cyberattacks have effects that are particularly unpredictable for several reasons.¹³ First, the victim of a cyberattack will not know precisely what capabilities the perpetrator of a cyberattack possesses, although between Stuxnet and Snowden's revelations, the US arsenal appears to be impressive.¹⁴ Second, in contrast to kinetic weapons where having a capability at all implies having a capability against anyone within range, having a cyberattack capability in the abstract does not mean that one has a cyberattack capability against a particular target or even a particular country, something that cannot be completely known even by its possessor before its cyber warrior cadres penetrate potential targets. Defenders themselves also may not know how vulnerable their systems are until tested. Third, the perpetrator of a cyberattack has only a partial insight into the victim's defenses. Fourth, neither may have a good understanding of how long it takes the victim to recover—which matters because, to a first-order approximation, the pain from a cyberattack is proportional to recovery time (i.e., the time to restore operations after a disruption attack, and the time to detect and eradicate induced errors from a corruption attack). To this uncertainty

must be added the difficulty of understanding the direct effects a capability may have on things potential aggressors care about, notably regime legitimacy and survival.

Unpredictability, in turn, has two types of effects. First, the victim, not understanding how painful reprisals can be, can exaggerate or, alternatively, deprecate the direct effects of reprisals. As argued below, that last unknown may be influenced by the narrative that the targeted regime thinks it can create before and after reprisals hit. Secondly, the aggressor, unsure of how painful reprisals can be, can deem such reprisals too weak to make a difference or too strong to be used confidently and hence unlikely to be used.

Let us start with the doubts of the potential aggressor, which is to say, the potential victim of a cyberattack reprisal. When faced with a threat of unknown size, people can be pessimists and exaggerate it or optimists and deprecate it. As a deterrent threat, cyberattacks would have to impress only those leaders tempted to do something aggressive enough to call forth a reprisal. It would seem that anyone with a bias for aggression is presumptively forced to be optimistic about its own chances in a confrontation, even though, as with 1914-era Germany or 1941-era Japan, leaders can be simultaneously pessimistic about their prospects in the world if they do not act. That being so, given two reprisal threats of equal expected size, the one of more predictable effect would seem to deter more than the one of less predictable, albeit potentially greater, effect. In the latter case, the optimistic potential aggressor can tell itself that the retaliatory cyberattack will not work or will not cause much damage if it does. In the case of a kinetic attack such as an air raid there is less psychological basis for insouciance.

If the potential aggressor wishes to counter the fears of its policy, it can bluff with a narrative that it has nothing to fear from a particular capability. The extreme version of denial was Mao Tse-Tung's statement early in the Cold War era that the nuclear capabilities of the United States were those of a "paper tiger" because hundreds of millions would survive a nuclear war in China, a vast agricultural society.¹⁵ Although this remark was derided as mad, its political purpose was to encourage the Chinese not to be cowed by the threat of nuclear reprisals. And, indeed, China had intervened against the United States in the Korean War without its territory being bombed, much less nuked.

With a cyberattack threat, the defensive narrative is both harder and easier to craft. If the threat of cyberattack reprisals goes unspoken and the targeted population is generally unaware that, for instance, access to their money could be denied, then creating a counter-narrative that says such a threat is empty may introduce a new fear (it is akin to “protest[ing] too much”). If the threat is explicit or if it is mentioned often enough by third parties, then there may be a point to introducing a new narrative. With cyberattacks, this new narrative could range from dismissal (“paper tiger”) to blame-shifting (“only the feckless will suffer”) and moralizing (“look how heinous the United States is by militarizing cyberspace”). Unless there have been enough incidents to make cyberattack threats tangible, the newness and the non-obviousness of the threat suggest that such a countering narrative is plausible.

Will others buy such narratives? The United States needs to deter many actors, and each is different. For some, the threat of cyberattacks may not register. For others, one or another counter-cyberattack narrative can work. Thus, it is not obvious that the United States would be better off crafting a narrative (“cyberattacks are really painful”), particularly if the effect of exaggeration is to scare the US public so that it palls from a confrontation lest their own systems falter. Two conditions help justify mounting such a narrative. If there is just one particular potential aggressor that needs to be deterred, the narrative can be focused in ways that scare others without being scary per se. It also helps to have a home front confident that it will not suffer from a counter-retaliatory cyberwar, perhaps because it believes in US superiority in cyberspace irrespective of whether it actually exists or would matter even if it did. Even then, the US developing a narrative that its cyberattacks can hurt others is not trivial. The best argument would come from carrying out cyberattacks and then pointing to the results—but the only cyberattacks that count are those against real foreign targets even though the whole purpose of deterrence is that if everyone behaves, no one gets to experience such attacks. And for cyber weapons, in large contrast to kinetic weapons, confidence in creating effects is limited to effects on a particular target system with its particular vulnerabilities, being administered in a particular way. Even then, the amount of damage that can be credibly threatened can and will change over time as the target adjusts to the threat.

As a rule, a target's adjustment to cyberattack threats has more effect on the efficacy of a cyberattack than when the threat is kinetic. The threat of a cyberwar deterrent in the long run is no greater than the costs—as measured in labor, time, resources, and decreased usability—of managing the risk to networks and systems down to tolerable levels. If the threat is sufficiently fearsome, a rational country would pay upfront for cybersecurity and resilience.¹⁶ Forgoing such pains may be a clue that such cyberattacks do not frighten people enough for them to ward it off. This keeps the threat of cyberattacks from being a particularly persuasive deterrent. No such confidence can be reasonably expressed in the face of, say, a nuclear threat.

The impact of uncertainty on the United States reinforces the cyberattack argument. If the United States is uncertain about the effects of a retaliatory cyberattack it may not judge with requisite confidence that it falls within the deterrence scale: the reprisal may fail to impress, or the reprisal may be overkill. Indeed, if uncertainty is great enough, a cyberattack reprisal option may be rejected because the likelihood that it falls below the range *and* the likelihood that it falls above the range may *both* be disqualifying. To be sure, US doubts, on their own, do not matter because the thoughts that matter are those of the potential aggressor. But if potential aggressors convince themselves that this is how the United States thinks, they may conclude that no weapon whose impacts are so uncertain will actually be used by the United States regardless of what US leaders want others to believe.

Conclusions

As long as other countries understand that the United States is capable of impressive cyberspace operations then the threat that it will use them in reprisal is inevitably part of the US deterrence package. The policy question is whether the United States should emphasize the possibility: by impressing adversaries with what cyberattacks can do, reminding adversaries that the United States would be willing to do it, and investing in making cyberattacks more reliable and even more painful. Central to any answer is an assessment of how cyberwar might fit into an overall US conventional deterrence posture. Its contribution to deterrence is likely to be modest compared to the level of punishment cyberattacks promise or compared to similar kinetic threats. Several reasons exist for this.

First, the effective deterrence window for cyberattacks is narrow. Compared to the capabilities that the United States is likely to bring for a high-end scenario—ranging from nuclear war to a major conventional aggression—cyberwar, at this stage, does not add much. The United States has abjured low-end cyberattacks such as DDOS attacks or website defacements. It has forsworn attacks on critical infrastructure in peacetime; in wartime, as noted, the threats of cyberattack may add little to the threat of conventional force. The United States can credibly threaten retaliatory cyberattacks to punish an aggressor's cyberattacks, but credibility for other scenarios is problematic.

Second, the effects of cyberwar are highly uncertain. Thus, they are easy for optimistic aggressors to downplay, and most who would go up against the United States would have to be optimistic to do so at all. They are also relatively easy to deprecate if aggressors need to worry about bringing others (e.g., political and military elites) along before striking. Indeed, it is difficult to find a narrative in which the threat is both scary and legitimate. Lastly, a potential aggressor savvy to how the United States deals with uncertainty may conclude that no weapons of such uncertain effects will actually be used in a retaliatory package that must pass some sort of proportionality test. Thus, when it comes to cyberwar and cyberattacks, the US must carefully consider its options.

Because offensive cyberspace operations make unimpressive deterrents when used by the United States,¹⁷ expectations about their efficacy should be tempered. They should probably be brandished only against aggression that, itself, comes via cyberspace. Retaliation in-kind limits the problem of the deterrence scale, and although the effects of retaliatory cyberspace operations are uncertain, the benefits of an aggressor's cyberspace operations suffer from similar uncertainty. **SSQ**

Notes

1. Deterrence by punishment is a subset of coercion: the threat of force to persuade others to do other than what they might. This subject has generated a rich literature, including Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966); Robert Pape, *Bombing to Win*, (Ithaca, NY: Cornell University Press, 1996); and Dan Byman, Matthew Waxman, and Eric Larson, *Air Power as a Coercive Instrument* (Santa Monica, CA: RAND, 1999). Deterrence (“do not do this”) is generally held to be easier than compellence (“do this or else”), but it is difficult to know whether deterrence works in any one case without knowing whether the prohibited act would have taken place in absence of a threat.

2. This article uses deterrence to mean deterrence by punishment. Granted, making threats is not the only way to persuade people not to do something bad. They may also think twice if obstacles are put in their path or the reward for success is diminished. This latter path is called deterrence by denial. Although a valid consideration in persuasion, it is not the topic here.

3. The history of the Cold War suggests that the vague threat of using nuclear weapons to change another country's nonnuclear behavior does not work very often, largely because it is not seen as credible; see Alexander George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974).

4. See, for instance, Max Fisher, "The Forgotten Story of Iran Air Flight 655," *Washington Post*, 16 October 2013, <https://www.washingtonpost.com/news/worldviews/wp/2013/10/16/the-forgotten-story-of-iran-air-flight-655/>.

5. And leaders are constantly evaluating the credibility of their counterparts: e.g., Kirk Semple and Elisabeth Malkin, "A Calmer Mexico Sees Trump Anew: As a 'Bluffer' at the Poker Table," *New York Times*, 27 April 2017, <https://www.nytimes.com/2017/04/27/world/americas/mexico-trump-nafta-trade.html>.

6. David Sanger and William Broad, "Trump Inherits a Secret Cyberwar Against North Korean Missiles," *New York Times*, 4 March 2017, <https://www.nytimes.com/2017/03/04/world/asia/north-korea-missile-program-sabotage.html>.

7. Dan Goodin, "Meet 'Great Cannon,' the Man-in-the-Middle Weapon China Used on GitHub," *Ars Technica*, 10 April 2015, <http://arstechnica.com/security/2015/04/meet-great-cannon-the-man-in-the-middle-weapon-china-used-on-github/>.

8. Kang Seung-woo, "Cyber Warfare Rising in China's THAAD Retaliation," *Korea Times*, 8 March 2017, http://www.koreatimes.co.kr/www/tech/2017/03/133_225311.html.

9. UN General Assembly (UNGA), *Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security*, UNGA, 70th sess. (New York: United Nations, 22 July 2015), http://www.un.org/ga/search/view_doc.asp?symbol=A/70/174.

10. See, for instance, Daniel W. Drezner, "Economic Sanctions in Theory and Practice: How Smart Are They?," in *Coercion: The Power to Hurt in International Politics*, ed. Kelly Greenhill and Peter Krause (Oxford, UK: Oxford University Press, 2018). He argues that although targeted sanctions against leaders are no more effective in compelling behavior than general ones, they are politically easier to maintain. Correspondingly, they may be more credible.

11. For examples, see Martin Libicki, *Cyberdeterrence and Cyberwar* (Santa Monica, CA: RAND, 2009).

12. As President Obama declared in 2015, "Among states, there has to be a framework [for behavior in cyberspace] that is analogous to what we've done with nuclear power because nobody stands to gain. And, frankly, although the Chinese and Russians are close, we're still the best at this. And if we wanted to go on offense, a whole bunch of countries would have some significant problems." Pres. Barack Obama, "Remarks by the President to the Business Roundtable" (address, Business Roundtable Headquarters, Washington, DC, 16 September 2015), <https://www.whitehouse.gov/the-press-office/2015/09/16/remarks-president-business-roundtable>.

13. The difficulty of knowing how much one country can hurt another in cyberspace is key to arguments that cyberspace operations may have weak coercive power. See, for instance, Erica Borghard and Shawn Lonergan, "The Logic of Coercion in Cyberspace," *Security Studies* 26, no. 3 (2017): 452–81, <https://doi.org/10.1080/09636412.2017.1306396>; and Jon R. Lindsay and Erik Gartzke, "Coercion through Cyberspace: The Stability-Instability Paradox Revisited," in Greenhill and Krause, *Coercion: The Power to Hurt*. The latter argues that the

Expectations of Cyber Deterrence

coercive potential of a cyberspace threat is generally limited because the target can disconnect threatened networks from the outside if the threat is unbearable. That noted, trends in digitization and connectivity mean that the cost borne by disconnection is rising every year.

14. Henry Farrell, “The Political Science of Cybersecurity IV: How Edward Snowden Helps U.S. Deterrence,” *Washington Post*, 12 March 2014, <https://www.washingtonpost.com/news/monkey-cage/wp/2014/03/12/the-political-science-of-cybersecurity-iv-how-edward-snowden-helps-u-s-deterrence/>.

15. See, for instance, Jeffrey Lewis, *Paper Tigers: China’s Nuclear Posture*, IISS Adelphi Series, no. 446 (New York: Routledge, 2014).

16. This formulation assumes states to be unitary actors that can transfer resources as needed. A country’s leaders may pay \$2 to avoid the blame from a cyberattack on a private network when the network owners could not or would not spend \$1 to protect the network and thereby void the threat—but there may be no reliable way to move the \$2 into the necessary cybersecurity investment.

17. Unfortunately, that does not mean that the United States itself may not fear cyberattacks as reprisals or counter-reprisals. Self-deterrence played a role in stymying the US reactions to Russian cyberspace operations during the 2016 election; see Michael Isikoff and David Corn, *Russian Roulette: The Inside Story of Putin’s War on America and the Election of Donald Trump* (New York: Hachette, 2018); and Ben Rhodes, *The World as It Is* (New York: Random House, 2018).

How Does Nuclear Deterrence Differ from Conventional Deterrence?

James J. Wirtz

Abstract

Nuclear and conventional deterrence are in fact quite different in terms of theory, practice, and impact. The differences play out in various ways depending on whether strategies of denial, punishment, or retaliation constitute the basis of the deterrent threat. The fact that battle outcomes with conventional weapons are so difficult to predict highlights the observation that conventional deterrent threats are “contestable.” The contestability of conventional threats can raise doubts in the minds of those targeted by conventional deterrence concerning the capability of the side issuing deterrent threats to actually succeed. Contestability is the Achilles’ heel of conventional deterrence. By contrast, deterrent threats based on nuclear weapons are largely uncontestable. They offer an ideal deterrent capability because they tend to eliminate optimism about a positive war outcome. The fact that nuclear threats are uncontestable does not guarantee that they will be viewed as credible, while the contestable nature of conventional threats does not preclude their credibility.



Strategy is the art of mustering all available resources in a concerted effort to alter an opponent’s political preferences so they correspond to one’s liking.¹ Deterrence is an exquisite example of strategy because it is intended to alter an opponent’s political preferences without fighting in an effort to preserve the status quo, guarantee the peace, or ensure that diplomacy, not war, is the method of change in international affairs.² The goal of deterrence is to prevent war or the occurrence of some

James J. Wirtz is dean of the School of International Graduate Studies, Naval Postgraduate School, Monterey, California. He is the author of *Understanding Intelligence Failure: Warning, Response and Deterrence* (Routledge, 2017) and coeditor of *Complex Deterrence: Strategy in the Global Age* (University of Chicago Press, 2009).

unwanted *fait accompli*. The onset of war constitutes the failure of deterrence and a total and potentially catastrophic failure of deterrence as a strategy.

The starting point for any deterrent strategy is capability. In other words, unless one is prepared to rely on bluff, one has to possess the military forces needed to execute threats if deterrence fails. For that matter, the likelihood of deterrence success increases if the opponent is aware that the party making a deterrent threat actually possesses the military capability needed to execute that threat. Capability, in turn, contributes to credibility, the idea in the mind of the opponent that a threat would actually be executed if certain redlines are crossed. Deterrent threats that rely on nuclear or conventional weapons are based on fundamentally different types of military capability, which, in turn, embody their own strengths and weaknesses when it comes to instilling the credibility of a threat in the mind of the opponent. Nuclear and conventional deterrence are in fact quite different in terms of theory, practice, and impact. The differences play out in various ways depending on whether strategies of denial, punishment, or retaliation constitute the basis of the deterrent threat.

This article will first explain why the different capabilities constituted by nuclear and conventional weapons actually shape the strategy of deterrence, especially the different ways nuclear or conventional threats create credibility, or the lack thereof, in the mind of the opponent. The article will then explore how conventional or nuclear threats play out differently when employed in different deterrence strategies.

Conventional vs. Nuclear Weapons: The Concept of “Contestable Costs”

In his classic study *Causes of War*, Geoffrey Blainey notes that anything that increases optimism about a positive war outcome makes the outbreak of war more likely.³ There is no reason to question Blainey’s judgment, but what is disturbing is that history reveals how frequently one or even both parties in a conflict actually get that estimate of likely outcomes wrong, leading to disastrous attritional campaigns that inflict costs far above initially expected gains. When World War I erupted, for example, euphoric Parisians actually drank the bars dry, only to find themselves mired in miserable trenches for years, suffering thousands of casualties weekly from “wastage”—exposure and disease—even before

enemy action. Optimism either facilitates or obfuscates misguided strategy or hides flawed estimates of the military balance or political realities, which are eventually revealed on the battlefield to the horror of all concerned.

Blainey's judgment reflects a fundamental problem faced by statesmen and officers alike: it is extraordinarily difficult to estimate combat outcomes involving conventional weapons. The starting point for contemporary estimates are simple quantitative measures. Achieving a force-to-force ratio of 1.5:1 or better in an operational theater or a 3:1 force ratio along the main axis of attack is likely to produce success. Backstopping these assessments are Lanchester firepower models that demonstrate why quantity has a quality of its own, so to speak, equipping the numerically superior side with an attritional advantage that accelerates over time. Unfortunately, in war, things rarely unfold as anticipated; sometimes the numerically inferior side wins. Hindsight often reveals that superior strategy or tactics, effective command philosophies and structures, disparities in force quality or morale, differences in the quality of weapons employed, or the ability to undertake combined-arms operations that produce significant effects especially when employed against less-sophisticated militaries can produce results at odds with simple quantitative measures.⁴ Only battle itself yields a definitive judgment about the balance between competing conventional forces.

The fact that battle outcomes with conventional weapons are so difficult to predict highlights the observation that conventional deterrent threats are "contestable," to employ a concept first suggested by Richard Harknett. Contestability suggests that conventional deterrent threats cannot be executed in a unilateral manner without significant regard for the opponent's military posture but instead occur as an outcome of the duel that is war. In other words, to execute a conventional deterrent threat, one literally has to fight one's way through the opponent's force, which can be expected to do everything in its power to negate the execution of that threat. The contestability of conventional threats can raise doubts in the minds of those targeted by conventional deterrence concerning the capability of the side issuing deterrent threats to succeed. According to Harknett:

The open promise that one has the potential to maximize the destructive effects of one's own weapons, while at the same time degrading the destructive effects of those of one's opponents, makes war a tempting roll of the dice. In this sense, it is not specifically the aggregate level of destruction that is critical, but whether

that level can be avoided in its entirety or delayed at least long enough to gain some decisive advantage against one's enemies.⁵

Those subjected to conventional deterrent threats have it in their power to interfere in the execution of those threats, making conventional deterrence contestable. When it comes to conventional capabilities, it is impossible definitively to demonstrate before an event unfolds that capability to execute those threats will be available because deterrence relies on the capabilities that remain after the opponent does its damage in battle. The target has a say when it comes to conventional deterrence, and, as Harknett notes, they are often more than willing to put their opinions to the test.

History is replete with incidents in which those subjected to conventional deterrent, or for that matter compellent, threats posed by even a vastly superior power adopted a "come and get it" attitude.⁶ When Saddam Hussein invaded Kuwait, for example, he told April Glaspie, the US ambassador to Iraq, that he did not fear a US response because Americans did not have the will to suffer 10,000 casualties a day in battle.⁷ When Japanese officials decided to attack Pearl Harbor, they believed that Washington would not respond vigorously to the setback and would instead reach some sort of negotiated settlement with Tokyo. Indeed, as the leading work on the subject suggests, conventional deterrent threats remain viable only as long as the target fails to develop what appears to be a cost-effective workaround, so to speak.⁸ Once Adolph Hitler was sold on the notion that blitzkrieg would produce a rapid collapse of French and British forces, for instance, the "Phony War" ended with a Nazi armored thrust that knocked France out of the war in about six weeks. Because combat itself is the ultimate arbiter of their effectiveness, conventional capabilities that appear on paper to be quite impressive might, for a host of reasons, not appear particularly significant to the target of conventional deterrent threats. For instance, the combat effectiveness of large conventional forces could be undermined by mediocre leadership, poor morale, faulty command and control, flawed doctrine, logistical handicaps, lack of domestic political support, or misguided strategy. Contestability is the Achilles' heel of conventional deterrence.

By contrast, deterrent threats based on nuclear capabilities enjoy a degree of certainty that can never be achieved by conventional weapons because the costs of nuclear war, especially engagements involving more than a few nuclear weapons, are largely uncontestable. The effects of

nuclear war also are easily calculated with a high degree of certainty, something that cannot be said about conventional weapons. For example, 50 percent of the people living within five-miles of a 1-megaton nuclear air burst will die promptly from blast effects; there is virtually nothing an opponent can do to mitigate the impact of that weapon once it detonates.⁹ Active defenses or an effective preemptive attack could reduce the number of weapons hitting the target, but it only takes one “leaker” to render those defenses superfluous. Nevertheless, as the number of nuclear weapons involved in an attack increase—in excess of approximately 100—the certainty about the levels of death and destruction inflicted also increases. During the Cold War, policy makers also went to great lengths to eliminate any guesswork when it came to the impact of nuclear retaliation (i.e., execution of a deterrent threat). During the tenure of Secretary of Defense Robert McNamara, for instance, “assured destruction” of the Soviet Union was pegged at the elimination of 70 percent of Soviet industry and 30 percent of the Soviet population, which would occur if 440 equivalent megatons of nuclear yield hit its targets.¹⁰ To achieve these levels of destruction in a worst-case scenario after suffering a Soviet nuclear attack, each leg of the triad was designed to deliver 440 equivalent megatons of firepower, giving the United States triple redundancy under a worst case (second-strike) scenario when it came to achieving its criteria for assured destruction. If the Soviets struck first, they could not prevent that destruction; if they did nothing at all, as critics often pointed out, most US nuclear weapons would simply end up making the rubble bounce.

Because today no defense exists against a nuclear attack involving more than a few nuclear weapons, a peculiar opportunity emerges whereby it is possible to inflict significant death and destruction outside the dialectic of war. Thomas Schelling aptly named this opportunity “the diplomacy of violence.”¹¹ In the past, noted Schelling, it was necessary to first defeat an opponent’s military forces before striking at countervalue targets, such as population, industry, leadership, and mechanisms of state control. Nuclear weapons, by contrast, allow deterrent or compellent threats to be executed against countervalue targets regardless of the state of the opponent’s defenses, the conventional military balance or even the outcome of a clash of conventional arms. Schelling posited a situation in which an opponent’s conventional forces were fully combat ready and effective, while the country they were intended to defend lay

in ruins, obliterated by nuclear strikes that could not be stopped. “Nuclear weapons,” according to Schelling, “make it possible to do monstrous violence to the enemy without first achieving victory.”¹² Deterrent policies based on nuclear weapons can disregard the normal rules associated with conventional war and move directly to killing opponents and destroying industry and infrastructure on a scale that some have suggested is impossible even to imagine before Armageddon.¹³

The guaranteed offensive capability provided by nuclear weapons creates an odd paradox, a strategic situation characterized by defense dominance. In other words, regardless of what takes place on a conventional battlefield, execution of a nuclear deterrent threat produces an outcome that would be construed as defeat by the side suffering the nuclear strike. Nuclear weapons are defensive in the sense that they can destroy an opponent in virtually any conceivable circumstance; the certain devastating offensive becomes the perfect defense because it guarantees the opponent’s defeat.¹⁴ Colin Gray offers a slightly different version of this counterintuitive observation: “two unstoppable strategic offensive instruments should have the same implications for statecraft as would a standoff between two impenetrable defenses.”¹⁵ Indeed, this is exactly what happened when a situation of mutually assured destruction emerged between the superpowers during the Cold War: under no realistic scenario was it conceivable for either side to declare victory following a full-scale nuclear exchange. When it comes to nuclear deterrence, the side issuing the deterrent threat may or may not win, but the side facing the deterrent threat is most certainly going to lose, and there is nothing the target of deterrence can do to sidestep this nuclear capability.

As Blainey might observe, it is difficult to be optimistic about a positive war outcome when one faces nuclear deterrent threats. Once executed, those threats can guarantee defeat in war, which makes them an ideal deterrent weapon. Because deterrence is a “peace strategy,” nuclear weapons offer an ideal deterrent capability because they tend to eliminate optimism about a positive war outcome, thereby preserving the peace. By contrast, conventional deterrent threats are contestable—there always will be an element of doubt that conventional capabilities will be available and effective when it comes time to execute deterrent threats. In terms of capability, nuclear weapons trump conventional weapons when it comes to making deterrent threats. Avoiding the prospect of a few dozen nuclear weapons detonating over urban-industrial areas is

probably going to outweigh the vast majority of competing political objectives that might be suggested as a justification for war.

The Issue of Credibility

Credibility is a complicated matter. On the one hand, it seems related to the fact that nuclear and conventional threats rely on different capabilities. On the other hand, credibility is influenced by pre-commitment to executing threats, which is not necessarily tied to capability. The target of a deterrent threat judges whether the threat is credible, that is, whether the threat would actually be executed in the event of deterrence failure. Nevertheless, predicting if a deterrent threat will be seen as credible by the target is not a trivial problem. The fact that nuclear threats are uncontestable does not guarantee that they will be viewed as credible, while the contestable nature of conventional threats does not preclude their credibility. When it comes to credibility, context and the particular deterrent strategy employed tend to shape opponents' perceptions of the credibility of deterrent threats.

The execution of a deterrent threat only occurs upon the failure of deterrence as a strategy. In other words, deterrence fails when the adversary crosses some redline, initiates hostilities, creates a *fait accompli*, or undertakes some sort of unwanted activity. The impact of deterrence failure on the side issuing a deterrent threat is indeed profound and in fact constitutes an exquisite strategic victory for the recipient of the threat. The side embracing a deterrent strategy now faces the failure of its "peace preservation strategy" and confronts the need to prosecute a war that it hoped to avoid in the first place. This is the political and strategic setting in which the credibility of the threat matters; it is one thing to threaten violence, it is quite another to actually engage in hostilities.¹⁶ These differences are likely to loom large in the minds of those subjected to deterrence threats. Ironically, those relying on deterrence often do not explore how the altered political, strategic, and military setting that would follow in the wake of deterrence failure might affect their willingness to execute deterrence threats. In some cases, they actually fail to think through *ex ante* what they might actually do if deterrence fails—the threat made by Pres. Barack Obama to deter Syrian use of chemical weapons is a case in point.

Under these circumstances, do nuclear or conventional threats carry more credibility? Challengers might hope that the side that made either

a conventional or nuclear deterrent threat will think twice about executing that threat, and the possibility of those second thoughts cast doubt *ex ante* on the credibility of deterrence. For instance, execution of a conventional threat might involve a lengthy attritional campaign that might not be worth the stakes. Execution of a nuclear threat might appear to be grossly disproportionate to issues under dispute, raising significant and lasting political costs, for instance, by breaking the so-called nuclear taboo under less than existential circumstances.¹⁷ In fact, the nature of a challenger's actions can be crafted to facilitate doubt and hesitation on the part of those now called upon to execute a deterrent threat. Challenges to conventional deterrence, for example, might take the form of a *fait accompli* that forces the side executing a deterrent threat to engage in a costly conventional war to respond to or reverse the challenge.¹⁸ Challenges to nuclear deterrence, by contrast, might take the form of incremental insults to the status quo, never clearly crossing the redlines that would trigger nuclear retaliation. In effect, the credibility of nuclear and conventional deterrent threats can be undermined, but in different ways. Anything that increases the contestability of conventional deterrent threats decreases their credibility, while anything that highlights the disproportionate nature of nuclear retaliation decreases the credibility of nuclear threats.

Although doubts about the credibility of nuclear and conventional deterrent threats emerge in different ways, these doubts share a key variable in common: they both posit that the side relying on deterrence as a strategy possesses some flexibility when it comes time to make good on its deterrent threat. In other words, the side issuing the deterrent threat retains a choice when it actually comes to executing that threat in the wake of deterrence failure. Although those making deterrent threats often accompany them with profound pledges that they will be executed if deterrence should fail, execution of most of the deterrence threats made today are in fact a matter of choice, which inevitably reduces their credibility.

This phenomenon was not particularly salient during the Cold War heyday of deterrence theorizing that focused on the Soviet-American confrontation. A conventional Warsaw Pact attack across the central front would have immediately and inevitably erupted in a major conventional war because of the existing force posture and standard operating procedures adopted by the North Atlantic Treaty Organization (NATO).

Although some feared that certain allies might try to opt out at the last minute, there was little doubt that in the event of a major attack, NATO would be fully engaged militarily even before higher headquarters could actually give the order to respond. If the balloon had gone up, so to speak, options would have indeed become extremely limited.

The credibility of nuclear and conventional deterrence is probably context specific; it is difficult to say that one type of deterrence is inherently more credible. Nevertheless, anything that reduces choice when it comes to executing threats in the wake of deterrence failure increases the likelihood that those threats will be perceived as credible *ex ante*. Actions that demonstrate political, strategic, and operational commitment to executing threats should deterrence fail increase credibility, but actions that reduce actual flexibility when it comes to executing a deterrent threat send a message that is difficult to ignore.

Retaliation, Punishment, or Denial: Does the Type of Strategy Matter?

Deterrence comes in three varieties: retaliation, punishment, and denial. At the heart of all three types of deterrence lie capability and credibility. It is thus possible to offer a judgment about how well nuclear and conventional weapons fulfill the demands posed by retaliation, punishment, and denial based on the need to be capable and credible. Of course, all three varieties of deterrence strategies can incorporate threats based on nonmilitary action: sanctions or diplomatic initiatives. All three also are enhanced if they are accompanied by inducements to increase the likelihood that the target will alter its preferences in a positive manner. Nevertheless, when it comes to making threats involving military force, do nuclear or conventional weapons have some advantage when it comes to making different types of deterrent threats?

Deterrence by retaliation threatens that the costs of some unwanted activity on the part of the opponent will exceed the gains secured by engaging in that activity. The costs inflicted do not have to be directed at reversing the unwanted gain but are instead inflicted by holding some valued asset at risk. For instance, to deter a territorial incursion, one might threaten to hold military forces, population, or industrial infrastructure at risk. Retaliation would not rely on military action to directly reverse the territorial incursion but to inflict unacceptable costs on the opponent for their land grab. In other words, if the opponent's forces

have crossed the border and are occupying their newly acquired territory, deterrence by retaliation would call for inflicting costs in excess of gains. Two or three cities, for instance, might be destroyed in exchange for every one seized by force. Deterrence by retaliation also is an all-or-nothing proposition that is not affected by the prospect of future compliance: costs are simply inflicted that outweigh the gains achieved through prohibited action. Retaliation as a strategy is thus attractive in situations where it is impossible or unlikely to return to the status quo, such as following a major nuclear attack.

The fact that nuclear threats are not contestable gives them an edge when it comes to retaliation. Retaliatory threats would be executed following a setback and that setback could be significant, resulting in loss of territorial sovereignty or important military capabilities. Because conventional threats could be contested, deterrence failure itself might occur because the opponent is attempting to eliminate the conventional military capability needed to execute the retaliatory threat in the first place. The credibility of retaliatory threats based on nuclear weapons is enhanced by the uncontestable nature of the threat, but their enormous destructive power reduces their credibility in less than dire circumstances. Threats to retaliate with nuclear weapons would probably appear incredible in the wake of modest infractions, but as setbacks begin to approach existential levels, nuclear retaliation, especially since deterrence failure itself might create a lack of alternatives, would probably be perceived as increasingly credible.

Many nuclear doctrines actually seem to be based on retaliation, which would be prompted by either existential threats or the loss of conventional capabilities. For instance, Avner Cohen has identified four redlines that might trigger an Israeli decision to employ its unacknowledged nuclear deterrent: (1) a significant military incursion into Israeli urban areas; (2) the elimination of the Israeli Air Force; (3) large-scale conventional air attacks directed against Israeli civilians; and (4) use of chemical, biological, or nuclear weapons against Israeli cities.¹⁹ What is interesting about this list is that three of the redlines reflect loss of conventional military capabilities combined with a growing existential threat (1–3), while option 4 reflects the prompt emergence of an existential threat. Under these circumstances, the threat to engage in nuclear retaliation following deterrence failure would probably appear to an opponent to be inherently credible. Nuclear weapons work best in strategies of re-

taliation because they offer a capability to inflict costs under nearly all conceivable circumstances. The credibility of the threat to use nuclear weapons also increases as the situation becomes dire. The loss of options increases the credibility of nuclear retaliation strategies.

Deterrence by punishment promises to inflict costs continuously on an opponent until compliance is achieved, which might be thought of as a return to the status quo ante bellum following a deterrence failure. In other words, deterrence by punishment threatens continuous or escalating damage to compel the target to abandon some course of action; it is a deterrent threat that morphs into a strategy of compellence following deterrence failure.²⁰ Unlike deterrence by retaliation, deterrence by punishment implies that costs are not “all or nothing,” but will persist or even escalate in the face of some unwanted initiative. This is a meaningful distinction because punishment is intended to create a situation in which the target can avoid potential loss by complying with compellent demands. In the aftermath of a territorial incursion, for example, one might threaten to conduct military strikes at regular intervals until the opponent abandons their ill-gotten gains. Opponents thus have the opportunity to abandon their gains as the costs of their initiatives grow. Deterrence by punishment thus allows the party practicing deterrence to fine-tune threats over time, while providing it with an opportunity to generate additional military capabilities to execute compellent actions following the failure of deterrence. Punishment does not have to be immediate to be effective, and its duration and extent largely depend on the willingness of the target to bear costs to preserve its gains. Deterrence by punishment might actually benefit from a process of gradual escalation so that the opponents have time to recognize that costs will increase the longer their undesirable policies persist.

Conventional weapons are probably best suited to deterrence strategies based on punishment, notwithstanding certain advantages enjoyed by nuclear weapons. For instance, deterrence failure could be prompted by an opponent's effort to eliminate capabilities needed to execute a punishment strategy. The fact that the effects of nuclear weapons are not contestable give them an edge over conventional weapons under these circumstances. Nevertheless, the fact that punishment can unfold over time helps to mitigate issues of contestability when it comes to employing conventional weapons. A punishment strategy would not necessarily be undermined by the fact that it might be necessary to overcome resis-

tance before inflicting punishment or that death and destruction might take time to accumulate. The destruction inflicted by nuclear weapons also might be deemed to be disproportionate to the issues at stake, reducing the credibility of threats of nuclear punishment. In other words, once nuclear weapons are used, an opponent might be forgiven for believing that things in fact might not get much worse. A punishment strategy implies that the opponent has an opportunity to minimize the costs incurred by challenging deterrence by returning to the status quo ante bellum or satisfying other demands to avoid suffering additional damage. By contrast, because practical considerations make it difficult to fine-tune the use of nuclear weapons, nuclear punishment could easily suggest to the target that existential issues are at stake and that the time for moderation or negotiation has passed. Conventional punishment carries the implication that worse is yet to come, while it might be difficult to discern levels of current and potential destruction once nuclear weapons are used.

By expanding the time horizon for the execution of deterrent threats, deterrence by punishment also involves a running contest over credibility. In other words, credibility rests on the ability to commit to the sustained infliction of costs over an extended period. On the one hand, this might be viewed as creating a very high bar for both nuclear and conventional punishment strategies. Those making punishment threats are actually promising to engage in a test of wills to determine who is best at bearing the costs entailed in securing their objectives. On the other hand, punishment strategies might restore credibility in the wake of deterrence failure. In other words, an initial response can be modest with a promise of worse to come. The fact that punishment strategies can easily incorporate escalation might actually bolster their credibility, because targets might find it highly credible that crossing a redline is likely to provoke a response, albeit at a minimal level initially.²¹ Punishment might thus permit the restoration of the status quo ante bellum without making matters worse by escalating to highly destructive levels of conflict. It increases the likelihood that deterrent threats will be executed and successful. It can also allow deterrence targets to rectify errors in face-saving ways without locking themselves into contests in which costs for all concerned might outweigh benefits. Because conventional forces can be more finely tuned than nuclear forces, all things being

equal, they are probably the weapon of choice when it comes to deterrence strategies based on punishment.

Deterrence by denial promises that a response to some unwanted act will directly prevent the opponent from achieving its objectives. In other words, deterrence by denial does not rest on the threat of inflicting unacceptable costs on the opponent or the threat to inflict costs until the opponent abandons its course of action but instead promises to prevent them from achieving objectives in the first place. To deter a territorial incursion, denial might thus involve: (1) threats to launch a preemptive attack or preventive war to deny the opponent the military capability to launch an attack; (2) threats to defeat an attack where and when it occurs by fighting at the border or launching a counteroffensive to reverse some ill-gotten gain; or (3) threats to eliminate the “bone of contention,” so to speak, before it can fall into the enemy’s hands, leading to a situation where temporary success is transformed into a Pyrrhic victory not only for the opponent but maybe even both sides in the contest. Although this third option might strike some observers as self-defeating or unrealistic, war sometimes creates enormous death and destruction. In other words, the effort to engage in the first two denial strategies could very easily bring about the third outcome.

It is difficult to assess whether or not conventional or nuclear weapons are best suited to deterrence by denial strategies. Denial strategies might be best thought of as broadly symmetrical to the threats they are intended to deter. In other words, a symmetrical response might be best suited to defeating an attack at its point of origin. Nevertheless, a conventional ground attack could be stopped with nuclear weapons. For instance, this strategy has apparently been adopted by Pakistan as a counter to India’s Cold Start conventional doctrine. Pakistan might promptly use battlefield nuclear weapons to defeat an Indian armored breakthrough.²² Use of nuclear weapons to stop a conventional attack, however, could lead an opponent to also use nuclear weapons, which would begin to make it difficult to discern victory from defeat among the contestants. Because denial promises opponents that they will not achieve their objectives, if not suffering outright defeat in war, it probably behooves the side seeking to deter to minimize the risk of prompting a nuclear exchange as part of a denial strategy. Under most circumstances, the destructiveness of nuclear weapons probably reduces the credibility of incorporating them into denial strategies. Broadly symmetrical responses that minimize the

costs of executing threats in the wake of deterrence failure are probably best suited to deterrence by denial. Conventional weapons likely fit these criteria better than nuclear weapons. Indeed, if one embraces a deterrence by denial strategy, by implication one should possess a credible capability to defeat an opponent quickly at minimal cost. Given those criteria, it would be difficult, albeit not impossible, to incorporate nuclear weapons into a denial strategy, especially against an opponent who is also armed with nuclear weapons.

Conclusion

Regardless of the weapons employed or the strategy adopted, capability and credibility are the key ingredients of deterrence success. Opponents must believe that the side issuing deterrent threats has the capability to make good on those threats and will actually execute them in the wake of deterrence failure. Therein lies the rub. Nuclear and conventional weapons constitute fundamentally different types of capability, while the inherent credibility of nuclear and conventional threats differs across specific contexts and strategies. Nuclear and conventional deterrence are different, but not in a way that would allow an observer to state that one deterrent capability is actually superior to another regardless of context or strategy.

Nevertheless, because nuclear weapons can inflict “uncontestable costs,” they do offer a capability that in many respects is ideal as a deterrent, especially when incorporated into a strategy of retaliation. No matter what an opponent does, including an all-out nuclear assault, a few score remaining nuclear weapons can carry out retaliatory threats that can inflict catastrophic levels of damage. The very destructiveness of nuclear weapons can undermine the credibility of nuclear threats in most circumstances. As the threat becomes existential or as choice is curtailed, however, the credibility of nuclear threats increases. It is thus no surprise that strategies of retaliation often involve nuclear weapons. Retaliation is not undertaken in the hopes of restoring the status quo ante bellum but as a way to inflict costs greater than the existential threat one is facing. Nuclear weapons offer a way to inflict extraordinarily high levels of death and destruction in extraordinarily dire circumstances, at a moment when conventional forces may be defeated and most of one’s country is already lying in ruins. Nuclear capabilities are most relevant

and nuclear deterrence is most credible when facing existential threats with no viable alternatives.

Conventional weapons, by contrast, are probably best suited to deterrence by punishment strategies. Because even small nuclear weapons are so destructive, nuclear use might work at cross purposes with the goals of a punishment strategy, to convince the opponent that they have an opportunity to correct their mistakes and avoid costs. Retaliating with nuclear weapons might in fact send the wrong signal, that is, the time for negotiating is over, creating an existential threat in the minds of the opponent. Admittedly, because conventional threats are contestable, conventional punishment strategies might appear weak to an opponent. Threats of conventional punishment could be seen as credible and still ignored because the opponent might believe that the side issuing a punishment threat will lack the capability to execute that threat when the time comes. In any event, because deterrence by punishment is based on the notion that a return to the status quo ante bellum is actually possible following deterrence failure, the fact that conventional punishment is contestable and requires time to inflict significant damage is not necessarily a limitation. Under these circumstances, creating an opportunity for an opponent to relent after crossing a cost threshold would have to be incorporated into a deterrence by punishment strategy. If nuclear weapons were employed in a significant way, it is possible that threshold would be immediately exceeded, prompting potential nuclear retaliation and the loss of a chance to return to the state of affairs existing before deterrence failure.

Deterrence by denial would seem to imply a broadly symmetrical response to the challenge. In other words, defeating an opponent at the point of attack seems to imply utilizing superior, albeit generally similar, forces. Thus, conventional weapons seem to be the weapon of choice when it comes to deterrence by denial, given that most threats involve conventional weapons and that the chance of nuclear escalation from the outset of hostilities is not necessarily credible in most circumstances. When nuclear weapons are integrated into deterrence by denial strategies, in Pakistan's nuclear doctrine or the NATO policy of flexible response for example, they are done so in a way that creates a pathway from conventional deterrence by denial to nuclear deterrence by denial. A conventional denial strategy is likely best suited to situations when the stakes are less than existential and superior military capabilities are

credible. A nuclear denial strategy seems more suited to dire situations in which conventional defenses are inadequate and the party issuing deterrent threats wants to raise the prospect of all-out nuclear war as a possibility. Once again, whether or not a nuclear denial strategy is credible rests on perception of the severity of the threat posed by the opponent and the lack of conventional alternatives to meet that threat.

Nuclear weapons offer a foolproof capability when it comes to deterrence. They can inflict staggering amounts of death and destruction under virtually any conceivable circumstance, and the costs threatened by nuclear deterrence are not contestable. This very destructiveness, to say nothing about the possibility of retaliation in kind, however, generally limits the credibility of nuclear deterrence to countering existential threats or to situations lacking viable military alternatives. Such situations are mercifully rare for most states.

By contrast, conventional deterrence is not foolproof; to be effective, conventional threats have to be executed with relative strategic, operational, and tactical dexterity. The costs of conventional deterrence are contestable, and opponents from time to time are willing to pay the costs. Credible conventional deterrent threats can be issued across a broader range of contingences compared to nuclear threats because the costs and risks of conventional deterrence correspond to a broader range of interests at stake in various disputes. Oddly enough, doubts about the credibility of conventional deterrence largely flow from doubts that the capability to execute deterrent threats will be available if deterrence should fail.

Admittedly, it is risky to offer generalizations about deterrence when strategies adopted and the idiosyncrasies in various contexts produce an endless stream of qualifications. Nevertheless, the difference between nuclear and conventional deterrence might indeed boil down to a single generalization: the target actually has a say when it comes to the execution of a conventional deterrent threat, while nuclear threats, especially after they cross a certain threshold, are simply not contestable. ■■■■

Notes

1. Colin Gray, *The Strategy Bridge: Theory for Practice* (New York: Oxford University Press, 2011).
2. It is exquisite because as Sun Tzu noted, “To subdue the enemy without fighting is the acme of skill.” Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press, 1971), 77.
3. Geoffrey Blainey, *Causes of War* (New York: The Free Press, 1973), 35–56.
4. Ryan Grauer, *Commanding Military Power: Organizing for Victory and Defeat on the Battlefield* (Cambridge, UK: Cambridge University Press, 2016), 9–18.
5. Richard J. Harknett, “State Preferences, Systemic Constraints, and the Absolute Weapon,” in *The Absolute Weapon Revisited: Nuclear Arms and the Emerging International Order*, ed. T. V. Paul, Richard Harknett, and James J. Wirtz (Ann Arbor: The University of Michigan Press, 1996), 52–53.
6. For a detailed explanation of why conventional deterrence often fails between strong and weak actors, see James J. Wirtz, *Deterring the Weak: Problems and Prospects*, Proliferation Papers, no. 43 (Paris: Institut Francais des Relations Internationales, Fall 2012), <https://www.ifri.org/en/publications/enotes/proliferation-papers/deterring-weak-problems-and-prospects>.
7. April Glaspie, “Confrontation in the Gulf; Excerpts from Iraqi Document on Meeting with U.S. Envoy,” *New York Times*, 23 September 1990, A-19, <https://www.nytimes.com/1990/09/23/world/confrontation-in-the-gulf-excerpts-from-iraqi-document-on-meeting-with-us-envoy.html>.
8. John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1985).
9. Although online nuclear weapons effects calculators are available, the classic study is Office of Technology Assessment, *The Effects of Nuclear War*, NTIS order #PB-296946 (Washington, DC: Office of Technology Assessment, May 1979), especially fig. 1, <http://ota.fas.org/reports/7906.pdf>.
10. Alain C. Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program 1961–1969* (New York: Harper & Row, 1971), 174.
11. Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), 22.
12. Ibid.
13. John Mueller, *Retreat from Doomsday* (New York: Basic Books, 1989).
14. Ted Hopf, “Polarity, the Offensive-Defense Balance, and War,” *American Political Science Review* 95 (June 1991): 475–93, <http://dx.doi.org/10.2307/1963170>.
15. Colin S. Gray, *Weapons Don't Make War: Policy, Strategy, and Military Technology* (Lawrence: University of Kansas Press, 1993), 15.
16. Wirtz, “Deterring the Weak: Problems and Prospects.”
17. T. V. Paul, *The Tradition of Non-Use of Nuclear Weapons* (Stanford, CA: Stanford University Press, 2009).
18. James J. Wirtz, “Life in the Gray Zone: Observations for Contemporary Strategists,” *Defense and Security Analysis* 33, no. 3 (2017): 106–14, <https://doi.org/10.1080/14751798.2017.1310702>.
19. Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), 237.
20. Matthew Kroenig has recently noted that “it is difficult to distinguish in practice between deterrence and compellence.” Matthew Kroenig, *The Logic of American Nuclear Strategy* (New York: Oxford University Press, 2017), 32. In the case of deterrence by punishment, the reason for the difficulty is clear—in the event of the failure of deterrence by punishment, execution of the punishment threat actually takes the form of a compellence strategy.

How Does Nuclear Deterrence Differ from Conventional Deterrence?

21. Although others have made an equally plausible argument that the high costs of executing coercive threats make them credible; see Dianne Pfundstein Chamberlain, *Cheap Threats: Why the United States Struggles to Coerce Weak States* (Washington, DC: Georgetown University Press, 2016).

22. Sumit Ganguly and S. Paul Kapur, *India, Pakistan, and the Bomb: Debating Nuclear Stability in South Asia* (New York: Columbia University Press, 2012).

Conventional Deterrence Redux: Avoiding Great Power Conflict in the 21st Century

Karl P. Mueller

Abstract

US national security strategy has increasingly come to focus on potential threats from Russia, China, Iran, and North Korea, all states with whom fighting even purely conventional wars can be expected to be extraordinarily costly, making deterrence of such conflicts the foremost task of the Department of Defense. This article examines the problem of conventional deterrence—making the direct costs of military aggression appear to be prohibitively high—and the challenges associated with convincing potential aggressors that they will be unable to achieve their goals inexpensively. It then applies these principles to the current effort to deter a potential Russian invasion of the Baltic States, a great concern to US and allied strategists due to the potentially catastrophic consequences should NATO's deterrence fail.

* * * * *

Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose.

—Bernard Brodie, *The Absolute Weapon*, 1946

Following the Allied victories of 1945, the United States faced a new era in which the scale of the potential conflict that dominated the strategic horizon—a third world war against the Soviet Union—led visionaries

Karl Mueller is a senior political scientist at the RAND Corporation in Washington, DC. He teaches at Georgetown and Johns Hopkins Universities and formerly was a professor at the USAF School of Advanced Air and Space Studies (SAASS). The opinions in this article are his own and do not reflect the views of any of his employers or any component of the US government.

like Bernard Brodie to recognize even before the first Soviet atomic test that deterrence would become the central preoccupation of US national security strategy.¹ Although it is deceptive and dangerous to draw facile analogies between the Cold War and the present, today Brodie's warning in the epigraph above once again obtains.

After more than 25 years of conflicts against relatively weak state and nonstate enemies, the US in its national strategy documents now identifies four potential adversaries that US armed forces must be prepared to fight: China, Russia, North Korea, and Iran.² While the military establishment is charged with being able to deter and, if necessary, defeat them,³ the likely costs of decisively defeating any of these states makes deterring them the more critical mission.

When the United States went to war against Panama, Iraq, Somali warlords, the Bosnian Serb Republic, Serbia, Afghanistan, al-Qaeda and its affiliates, Iraq again, Libya, and most recently the Islamic State, the decision makers always anticipated that the costs of achieving US objectives would be affordably low. Those prewar estimates were sometimes well off the mark in one direction or the other, and sometimes willfully so, but in each case the benefits of military success were expected to outweigh the price required to achieve it.⁴

The situation is different with today's adversaries list. In each of these four cases, to varying degrees, the likely direct and indirect costs to the United States of decisively winning a major war and achieving a satisfactory postwar outcome should be expected to far outweigh the benefits of victory.⁵ Winning the war would presumably be better than losing it, of course, but waging even a very successful war against China, Russia, North Korea, or Iran would represent a massive failure of US national security policy. This is most obvious with respect to Russia and China—major powers capable of contesting every war-fighting domain in a conflict with the United States—which could easily inflict losses on US forces at rates they have not suffered since 1945 even in the absence of nuclear escalation and without taking into account other types of costs from a war between major global powers. Thus, the true measure of strategic success is *avoiding* fighting a war without sacrificing important US interests in order to do so.⁶ In short, the goal is successful deterrence.

With Russia and China appearing to be increasingly inclined toward aggressive international actions, we have moved beyond the idyllic post-Cold War period when most great-power deterrence could comfortably

be left to nonmilitary instruments of power, at least on the surface. Yet the interests the United States is most concerned with protecting against attack by its rivals are not so vital that threats to use nuclear weapons in their defense are either desirable or likely to be credible. Therefore, conventional deterrence is the order of the day. This article examines the subject of conventional deterrence in the early twenty-first century as a somewhat informal primer for policy practitioners, focusing as its central case on the contemporary problem of making strategy to deter Russian aggression against the most exposed allies that the United States is committed to defend: the Baltic States.

Don't You Dare: The Idea of Deterrence

Distilled to 140 characters, deterrence is causing someone not to do something because they expect or fear that they will be worse off if they do it than if they do not.⁷ This can be achieved by making it appear unlikely that the action will succeed (deterrence by denial), by making the expected costs of taking the action appear prohibitively high (deterrence by punishment), or by a combination of both.⁸ It is possible to deter—or to try to deter—all sorts of misbehavior (as any police officer, vice principal, platoon sergeant, or long-suffering parent can attest), but for the present discussion we will limit our scope to deterring countries from starting wars or committing other acts of military aggression.⁹

Rather than delve at length into deterrence theory, here we will merely note four key points that will be particularly germane to the discussion that follows. First, the goal of deterrence is to make the target *choose* not to attack even though it has the ability to do so. Disarming or destroying the opponent to prevent it from attacking, or doing something else that physically eliminates the threat, is not deterrence; instead it is what Thomas Schelling dubbed “pure” or “brute” force.¹⁰ Brute force can be a useful way to solve national security problems, especially when the enemy is weak, but deterrence is usually cheaper if it can be achieved.

Second, since the target is choosing between attacking and not attacking, deterrence does not simply depend on making war look bad—it depends on making war look worse than the alternative. If the status quo is reasonably attractive, as it is for most states most of the time, deterrence is likely to be easy. However, a desperate actor may decide to attack even though it is not optimistic about the likely results of going to war, if it thinks that not doing so would be unacceptably costly or dangerous.¹¹ In

other words, the stakes are critical, as is the baseline against which policy options are being compared. Moreover, measures that are intended to deter by posing threats against aggressors can also undermine deterrence by making their targets feel less secure, reducing the expected value of not going to war.¹²

Third, there are many ways to make aggression appear less attractive than the alternative. Threats of punishment—increasing the expected costs of aggression—are the approach most strongly associated with deterrence and can involve nonmilitary as well as military action. Conversely, it is possible to deter by altering the adversary's expectations about how likely it will be to win (or achieve other desired objectives) if it attacks, usually called “deterrence by denial”; the line between punishment and denial can be ambiguous because taking steps to prevent an enemy from winning almost always includes imposing costs as well. War can also be made less attractive by increasing the appeal of not attacking through reassurance measures or promises of rewards that make not going to war more attractive; whether or not one calls this a form of deterrence *per se*, it is nevertheless part of the deterrence process.¹³

Finally, and most important of all, deterrence happens in the mind of the potential aggressor. What the enemy *believes* about the future is what matters, and what the costs and benefits of war will actually be are only relevant insofar as this affects the enemy's thinking. Objective reality will of course suddenly become very important if deterrence fails and war begins. Since decision makers can misperceive reality for many reasons, and because future events are often difficult to predict, many wars are started by states that probably would have been better off if they had not attacked.¹⁴

Is Conventional Deterrence Really a Thing?

The systematic study of deterrence emerged from the advent of nuclear weapons, and for decades after 1945 deterrence theory focused heavily on nuclear subjects. Nuclear attack was the most important thing to deter—the only military threat that genuinely imperiled the survival of the United States then or now. Nuclear weapons were the most powerful tool for deterrence as well as the most obvious means for deterring nuclear war. Even today, someone who refers to a nation's “deterrent forces” is likely to be referring to nuclear weapons and their delivery

systems, and most readers will initially assume they are doing so even if this is not the intent.

In fact, deterrence has been part of international politics literally for ages and was especially prominent from the early years of the airpower revolution, since this appeared to make states vulnerable to grievous damage in war whether or not their enemies were able to defeat them on land or sea.¹⁵ Scholars in the second half of the Cold War began to refer to “conventional deterrence” as a distinct subject of study and policy to distinguish it from the study of nuclear deterrence,¹⁶ but it is nuclear deterrence that should be regarded as the special case, reflecting the same fundamental dynamics as other types of deterrence but with a number of peculiar—and hugely important—features that derive from the exceptional destructiveness of nuclear weapons.¹⁷ Thus conventional deterrence is ironically just that, conventional: it is normal, typical, unexceptional deterrence, the military component of nonnuclear deterrence that keeps the peace most of the time between almost every country and the potential foes that could attack it if they chose to do so, but do not. Yet talking about “conventional deterrence” as a category is often worthwhile precisely because people so often still tend to think of deterrence only as something that one does with nuclear weapons.

Misunderstanding Conventional Deterrence

Conventional deterrence is not simply another name for nonnuclear deterrence. There are many tools other than nuclear ones that can be used for deterrent purposes, including threats of economic sanctions, blockades, cyberattacks, diplomatic ostracism, and terrorist bombings. Leaders can even be deterred from starting wars by the fear that ordering aggressive action will cause history to judge them harshly.¹⁸ None of these is what we generally have in mind when we refer to “conventional deterrence.” Instead, when strategists consider conventional deterrence their focus is usually on the deterrent effects of conventional war per se, the direct and indirect costs of events on the battlefield. These begin with casualties and materiel losses but may also include harm to civilians, domestic political problems or loss of regime or national prestige due to military failure, or a host of other secondary effects.

Nor is conventional deterrence synonymous with deterrence by denial, although the two are related. Denial involves making the adversary doubt that attacking will be successful. Conventional deterrence often

includes this, but it can also be based entirely or in large part on threatening to impose costs on an attacker by resisting its assault, invasion, or occupation; perhaps the clearest examples of this are the territorial defense strategies of states such as Switzerland and Yugoslavia during the Cold War.¹⁹ This tends to be especially true when the potential attacker is much stronger than the defender, which may make it implausible to imagine being able to defeat the enemy. Threatening to make an aggressor pay a high price in blood and treasure on the battlefield even though you cannot hope to defeat it in the end is deterrence by punishment, just as threatening to launch punitive attacks against its homeland would be.²⁰ If the threatened punishment appears severe enough to outweigh the incentives for attacking, deterrence should hold.²¹

Thus, being able to defeat an attacker may not be necessary for conventional deterrence to work. On the other hand, it may not be sufficient. An enemy that is strongly motivated to attack by fear, desperation, a desire for martyrdom, or a mystical sense of destiny may be willing to go to war even if the chances of military success appear very small. Or an attacker may seek objectives that cannot realistically be denied because they are so limited or intangible.

Deterrence is not, therefore, a shortcut alternative to defense. There are certainly situations in which conventional deterrence can be achieved with smaller investment of military resources than would be needed to actually repel the aggressor, but strategists should not fall into the trap of thinking that deterrence is a surefire formula for inexpensively solving security problems that are too difficult to address by building capabilities sufficient to defeat the threat.²²

The Reality of Conventional Deterrence

Conventional (and other) deterrence involves making the value of aggression—its expected benefits minus the expected costs—appear worse than the expected value of not going to war, by either making the costs of victory look large, making the likelihood of success look small, or both. But this rather algebraic way of thinking about deterrence can be unsatisfying from a policy-making perspective because these costs and benefits and values are rarely quantifiable in practice, frequently leaving the key questions unanswered: what is needed to successfully deter, and how much of it is likely to be sufficient?

Predicting the answers in a particular case always involves uncertainty—and often a great deal of it.²³ This is not just because our intelligence about the adversary is incomplete but also because the answer will depend on conditions and decisions that are indeterminate until the crisis actually develops. But history still has a lot to tell us, starting with the fact that deterrence failures are rare. States mostly do not attack their neighbors, even when no one is trying especially hard to deter them. Even small and successful wars tend to be costly and destructive: they often unfold in unexpected ways, so starting them is inherently risky, and initiating wars now tends to be frowned upon by audiences that most leaders care about.²⁴

Yet deterrence does still fail from time to time, and some states are more prone to breaking the peace than most of their peers even in an era of strongly declining rates of international conflict.²⁵ There is a vast literature examining the causes of war,²⁶ but with respect to the specific question of when deterrence tends to hold or to fail in the breach, no single work is as salient for the present discussion as John J. Mearsheimer's evergreen *Conventional Deterrence*. Examining twentieth-century conflicts in Europe, the Middle East, and Asia, Mearsheimer made the case that there exists something approaching a necessary condition for deterrence failure that is both simple and consequential: modern states as a rule do not launch wars against each other unless they see a path to achieving a quick and relatively inexpensive victory.²⁷ If they anticipate that a war will be a long, attritional struggle, even if they expect to prevail in the end, they will generally choose not to attack. (This is not to say that states will be unwilling to bear the burdens of long and costly wars if these are thrust upon them, only that they are unlikely to voluntarily initiate such conflicts.) This proposition is consistent with the standard cost-benefit calculus of deterrence, and the historical pattern fits it strikingly well, even when looking beyond the cases of twentieth-century mechanized warfare that are the domain of *Conventional Deterrence*.²⁸ The idea is that convincing a prospective attacker that aggression will inevitably be expensive whether or not it will ultimately be successful should generally be enough to make deterrence work.

There are two aspects of this conclusion that are important to note, however. First, this is not the same as saying that it is *necessary* to deny the prospect of a low-cost victory in order to deter. In fact, there are countless past and present examples of states that could win wars easily

and inexpensively nevertheless deciding not to start them—wars are exceptional events. Thus, deterrence strategists should not conclude that their efforts will be in vain if the adversary still imagines an inexpensive victory to be possible. But a strategy that eliminates that prospect should give the deterrer high confidence of success.

Second, believing that one can win quickly does not depend on actually being able to do so. Misperception and miscalculation—along with simple unpredictability—can make war look unrealistically attractive. Moreover, leaders who are strongly motivated to go to war are also likely to overestimate their prospects of success, as Japan famously did in 1941 when leaders who could not bear the prospect of calling off their war in China embraced the idea that it would be possible to defeat the Americans and British by launching a series of lightning attacks that would quickly demoralize their enemies into striking an armistice. Thus, the gold standard of conventional deterrence strategy is not simply placing an easy victory out of the adversary's reach but making it impossible for an enthusiastic enemy general or admiral with a gift for persuasive argument to tell a convincing story to the nation's leaders about how such an outcome is possible.

Conventional Deterrence in Northeastern Europe

This brings us to the challenge of deterring a Russian attack against NATO's northeastern flank in the 2020s. This has become a matter of central concern for US and allied strategists since the 2014 Russian invasions of Crimea and eastern Ukraine, given the operational difficulty of effectively defending the Baltic States against a Russian invasion. Admitted to the alliance in 2004, when Western leaders imagined that Russia's days of menacing its European neighbors were behind it, Estonia, Latvia, and Lithuania are together the size of West Germany during the Cold War yet have a combined population only one-tenth as great. Most significantly, they lie on Russia's border where they could be invaded on short notice by a relatively large force, and it would be difficult for their distant NATO allies to send reinforcements once a conflict was under way due to Russia's ability to interdict movement across the Baltic Sea or through the narrow overland corridor connecting Poland and Lithuania.²⁹ Now that Russia has reemerged as a sometimes belligerent and potentially aggressive great power, NATO faces the problem of preparing to fulfill its commitment to protect its most exposed members.

Deterring a possible Russian attack in the Baltics is important for several reasons. Not standing up to an invasion would potentially imperil the existence of the Atlantic Alliance by demonstrating its inability or unwillingness to provide the security guarantee that is the central pillar of the North Atlantic Treaty. It would certainly be a craven abrogation of a solemn national commitment by the United States.³⁰ On the other hand, if an attack on the Baltics became the opening battle in a longer and wider war between Russia and NATO, the costs to both sides could be enormous, particularly given the potential for nuclear escalation in any sustained major conflict involving Russia, a state with considerable though potentially brittle conventional military capabilities but a large and robust nuclear arsenal.³¹

Fighting to defend the Baltics could well entail launching substantial attacks into Russian territory to reduce the effectiveness of enemy air defenses and long-range rocket and missile forces, thus crossing a potential Russian escalatory redline.³² Moreover, were Russia to invade the Baltic States and then find that things had gone badly wrong for its gambit, the incentives to try to escalate their way out of a deteriorating situation might well appear irresistible to Russian leaders facing a choice between accepting a conventional military defeat that would be very expensive in military terms and might be even more so politically and a possibility that employing nuclear weapons could lead to a more satisfactory outcome (though it might instead result in an even greater disaster). In short, a Russian victory in a war in the Baltics could be a strategic catastrophe for the United States and NATO, and a Russian defeat could be far worse: unlike the enemies the United States has faced in the wars of the last several decades, Russia genuinely does have the ability to destroy the Republic.

Why Deterrence in the Baltics Should Be Easy

To say that a Russian invasion is important to avoid is not to assert that it is likely. In spite of some belligerent rhetoric since 2014, such an attack does not appear imminent, and there is good reason to believe that Russia does not currently have active revanchist ambitions regarding the Baltic States. Moscow appears to regard them as being less in its natural sphere of influence than Belarus, Ukraine, or the former Soviet republics in the Caucasus and central Asia.³³ Moreover, a Russian attack on one or more of the Baltic States would risk a ruinous prolonged

war with a larger and far wealthier Atlantic Alliance that Russia is not well prepared to fight, and it would be highly disruptive to the Russian economy whether or not the West and China united to punish Russia for its actions.

Thus, the incentives for Russia not to attack its Baltic neighbors are strong. On the other hand, a successful attack against one or more of the Baltic States—seizure of significant territory either temporarily or permanently that NATO was unwilling or unable to reverse—could represent a notable strategic gain for a country that consistently identifies NATO as a principal threat to its security and might be an attractive prospect for a government seeking to bolster its domestic support by achieving a conspicuous military success.³⁴ Could such considerations actually make aggression in the Baltics appear to be worth the gamble for Moscow?

Historical experience suggests that the possibility is one to take seriously. It is hard to imagine that a Russian regime—barring a scenario in which it feared that NATO was preparing to launch an attack against it—would expect the benefits of a successful attack in the Baltics to outweigh the costs and risks of a prolonged major war with NATO's leading powers. However, it does not strain credulity to imagine circumstances under which Russian leaders might come to believe that striking one or more of the Baltic States would not lead to such a concerted response and therefore that a fast and inexpensive victory could be achieved while the Alliance dithered. Russian analysts and leaders might believe—correctly or incorrectly—that in the breach NATO members would decide that fighting to defend their Baltic allies, or especially to liberate their territory after a *fait accompli* occupation, would be prohibitively costly or dangerous. Indeed, it is not difficult to find this sentiment being expressed in the West, even setting aside the potential behavior of domestic political actors in NATO member states that might be beholden to Russian sponsors. In addition, it is possible that a Russian conventional attack in the Baltics, although originally unplanned, could occur as a result of an escalatory spiral in a crisis that began with so-called gray zone actions that were intended to occur below the threshold of overt military action.

None of these possibilities sounds particularly attractive for Russia, and under virtually any circumstance aggression in the Baltics would be considerably more dangerous for Moscow than invading Ukraine was.

But wars have been started based on prospects that appeared similarly dubious to skeptics in the past. And while Russia appears not to intend to attack the Baltics at present (in spite of frequently exploring such operations in military exercises and war games), such intentions can shift relatively quickly, as the change in Crimea's fortunes between the 2000s and 2014 illustrates.³⁵

Why Deterrence in the Baltics Might Be Difficult

If Moscow decided that the idea of aggression in the Baltic States was appealing, it would certainly have the means to undertake such an operation. Russia has demonstrated in military exercises the ability to mobilize a considerable force of army and airborne units in its Western Military District relatively quickly, and they have capabilities that appear sufficient to advance deep into Baltic territory in short order thanks to a combination of favorable geography, low NATO force density in the sparsely populated Baltics, and impressive Russian investments in long-range fires, ground-based air defenses, and other anti-access/area denial capabilities.³⁶ During the 1980s, West Germany's frontier with the Warsaw Pact was defended by nine mechanized corps with additional forces not far behind.³⁷ The Baltic States' border with Russia and Belarus is approximately the same length, but they would be defended by a total ground force of fewer than nine (mostly lighter) brigade equivalents. To be sure, the Russian army is far smaller than the Warsaw Pact's forces of yore—it might invade the Baltics with a force on the order of some 22 brigade equivalents,³⁸ but this does not solve the problem of a very low force-to-space ratio preventing the defenders from being able to block all the potential avenues of advance toward the Baltic capitals. Being able to reach their key territorial objectives in a matter of a few days would give NATO little opportunity to use its superior airpower to inflict attrition against the invaders,³⁹ especially given the risk posed to fourth-generation aircraft by Russia's extensive, multi-layer air defenses, and Moscow thus could reasonably anticipate a short and at least initially victorious war, a situation Mearsheimer identified as conducive to conventional deterrence failure.

In short, Russian leaders would have a viable theory of rapid victory at low cost—in fact, they might have several, including ones corresponding to each of the strategy categories that Mearsheimer identified as attractive alternatives to slow wars of attrition in *Conventional Deterrence*.

First, the non-Baltic NATO members might not resist an invasion at all due to political lethargy, subversion, averseness to casualties, fear of Russian nuclear escalation, or some other factor. Second, NATO forces seeking to defend the Baltics might generally be bypassed by the invaders, resulting in their rapid, blitzkrieg-like arrival in Tallinn, Riga, or Vilnius and Kaunas. Third, the invaders might simply crush the defenders thanks to superior firepower and the protection afforded by their air defense umbrella. Fourth, particularly if Moscow lacked confidence in its army's ability to successfully execute a more ambitious attack, it might expect to achieve a worthwhile victory through a limited-aims attack to seize more easily defensible territory along its border.

NATO would have a variety of available ways to increase the costs to Russia of launching such an attack if it decided not to accept the result of the offensive. In addition to the economic punishment that could be inflicted against it,⁴⁰ Russian forces in the Baltics could be subjected to sustained bombing by NATO air forces, attacked by partisan resistance (including bypassed regular forces), and ultimately struck by a counteroffensive once NATO deployed its numerically superior but mostly slow-mobilizing ground forces. The problem with each of these responses from a deterrence perspective, however, is that their deterrent power would depend on Moscow believing that NATO would have the will to carry on the fight for months or years following an initially successful Russian advance. If Moscow expected that the Alliance, or a sufficient number of its key members, would be unwilling to bear the costs associated with such a sustained effort to restore the territorial integrity of the Baltic States, it might plausibly anticipate that it could achieve a *fait accompli* in the Baltics at relatively low cost. Moreover, it might expect to be able to undermine NATO's determination to stand and fight through means ranging from subversion and propaganda in the West to threats of punitive attacks against Alliance members or of nuclear escalation if NATO refused to make peace on terms acceptable to the Kremlin.

This illustrates the central challenge of conventional deterrence as discussed earlier: To have a comfortable degree of confidence that deterrence will prevail, it is (or at least may be) necessary not only to make an inexpensive victory actually unachievable for the opponent but also to deny the adversary the ability to construct for itself any narrative theory of victory describing how aggression could be expected to pay off at

relatively little cost to itself. What is needed to accomplish this will depend at least in part on what that theory of victory might be.

In the case of conventional deterrence in the Baltics, the response to this challenge that has attracted a number of US analysts and, on a more limited scale, US and NATO military leadership in the past several years has centered on increasing the presence or availability of NATO armored and mechanized forces in the Baltic States capable of interposing themselves in front of a Russian invasion. In principle this should be complemented by improvements to US and NATO air forces' capabilities to attack invading mechanized forces in spite of Russian air defenses and threats against European air bases.⁴¹ The purpose of such a military posture would be to increase the expected costs of an attack through combat on the ground and, by slowing the invaders and forcing them to mass, enabling NATO airpower to inflict heavy attrition against them before they could reach territorial objectives such as being able to surround or overrun the Baltic capitals.⁴²

Much as Mearsheimer argued that NATO's conventional forces on the Central Front in the 1980s were potent enough to credibly threaten prohibitively heavy punitive losses against a Warsaw Pact invasion,⁴³ the threat posed by deploying NATO mechanized forces to the Baltics is not that they would be sufficient to defeat a Russian offensive but that they would present Moscow with an inescapable realization that aggression would entail heavy losses to the invaders and that achieving Russian success on the battlefield would require inflicting serious casualties on the armies of major NATO powers who would then likely be unwilling to acquiesce to successful Russian aggression. If such a deterrence strategy created in the minds of Russian leaders a firm expectation that even a successful invasion of the Baltic States would be extremely costly to its army, the prospects for successful conventional deterrence should be strong.

Whether such measures are worth undertaking remains a matter of considerable debate, particularly surrounding the question of how much weight NATO strategists should give to Russia's apparent disinterest at present in attacking the Baltics and to its capabilities to carry out such an operation were Moscow's intentions to change in the future.⁴⁴ Even advocates of an enhanced conventional deterrence posture in north-eastern Europe tend to accept the proposition that an invasion of the

Baltic States is inherently unlikely, but the potential for major escalation of such a conflict (particularly but not only the use of nuclear weapons) is a powerful argument in favor of investing at least limited resources to minimize the chance that it might occur.


Conclusion: The New Primacy of Deterrence

Peace is our profession.

—Strategic Air Command motto

This article began with the proposition that a war with any of the states identified in the *National Defense Strategy* as the primary sources of threat to US security would be much worse to win than to deter. This is perhaps most obvious in the case of Russia, given the threat of nuclear escalation in such a conflict, but the same can well be said of potential wars with China and, for that matter, Iran and North Korea. Deterring wars with these countries is not the only function of America's armed forces, but it is the most consequential one.

In the wake of Russia's attacks against Ukraine, it is easy to look askance at deterrence as a weak reed upon which to base national security policy, but this is an error to avoid. Deterrence did fail in 2014, but the West had not made much of an effort to deter aggression against Ukraine (neither, for that matter, had Ukraine itself).⁴⁵ More importantly, the fact that deterrence sometimes fails does not mean it does not work or that we do not understand it.

Deterrence in the twenty-first century presents some new challenges to strategists, most notably in developing a sound understanding of cyberwarfare as both a threat to deter and a tool of deterrence. But there is little basis for thinking that our problems with deterrence derive from our well-developed theories about it being obsolete. Deterrence does fail, because it can be hard to convince people who are strongly motivated to go to war that doing so is a bad idea, especially if one does not correctly understand their expectations and fears, and this has always been true. Knowing how deterrence works is an essential starting point for making good strategy, and if a potential aggressor can be persuaded that going to war will be difficult and costly, the prospects for successful deterrence will be good. But identifying that objective is just the beginning of the journey. 

Notes

1. Fred Kaplan, *The Wizards of Armageddon* (New York: Simon and Schuster, 1983).
2. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*, <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.
3. *National Security Strategy of the United States of America* (Washington, DC: The White House, December 2017).
4. For example, in 1991 and 2001, victory against Iraq and the Taliban, respectively, came more quickly and less expensively than many in Washington expected. In contrast, when planning the 2003 invasion of Iraq, the Bush administration instructed US military planners not to prepare for the uncomfortable possibility that the war might become a protracted conflict; see Nora Bensahel, Olga Oliker, Keith Crane, Rick Brennan Jr., Heather S. Gregg, Thomas Sullivan, and Andrew Rathmell, *After Saddam: Prewar Planning and the Occupation of Iraq* (Santa Monica, CA: RAND Corporation, 2008), <https://www.rand.org/pubs/monographs/MG642.html>.
5. The costs of a war on the Korean peninsula can (and should) also be expected to be shockingly high given the size and nature of the North Korean arsenal, although US allies would suffer most of the friendly casualties (see Michael J. Mazarr, Gian Gentile, Dan Madden, Stacie L. Pettyjohn, and Yvonne K. Crane, *The Korean Peninsula: Three Dangerous Scenarios* (Santa Monica, CA: RAND Corporation, 2018), <https://www.rand.org/pubs/perspectives/PE262.html>). It is perhaps easier to imagine that a war with Iran would be an attractive proposition, but given that the Iraq war cost the United States thousands of lives and trillions of dollars yet produced unimpressive results, in spite of the smaller size and greater fragility of that enemy, prudent decision makers should not embrace such fancies.
6. “Master Sun says . . . It is not the pinnacle of martial achievement to fight and win a hundred battles. It is the pinnacle of martial achievement to win without fighting.” Sun Tzu, *The Art of War*, trans. Jonathan Clements (London: Constable, 2012), 48.
7. There are many other definitions of deterrence, some of which are just as valid as this one and most of which are longer, but they seem to generate less debate today than they did a generation ago. Readers interested in more discussion of these definitional issues than appears here and in the other articles in this volume should see among many others Glenn H. Snyder, *Deterrence and Defense* (Princeton, NJ: Princeton University Press, 1961); and Michael J. Mazarr, *Understanding Deterrence* (Santa Monica, CA: RAND Corporation, 2018), <https://www.rand.org/pubs/perspectives/PE295.html>.
8. Deterrence is a subset of coercion, which is causing someone to behave in a way that you want by making the value of misbehavior look too low to be worthwhile. If you want the target *not* to do something, the coercion is deterrence; if you want them to do something they wouldn’t otherwise do, it is what Thomas Schelling dubbed “compellence.” See Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), chap. 1.
9. These are not boundaries to be too fussy about at the margins. Most of what is true about deterring states also applies to nonstate actors that have some degree of state-like characteristics, and deterring other sorts of intensely hostile acts has much in common with deterring armed aggression.
10. Schelling, *Arms and Influence*. Similarly, in policing, threatening people with punishment if they commit crimes is deterrence, locking criminals up so they don’t have the opportunity to break the law is brute force; see Mark A. R. Kleiman, *When Brute Force Fails: How to Have Less Crime and Less Punishment* (Princeton, NJ: Princeton University Press, 2009).

11. Japan deciding to attack the United States and the British Empire in 1941 is the classic example of such a case. Peace can be unappealing for a variety of reasons, ranging from domestic politics to fears that a deteriorating security situation means that not fighting now will simply mean fighting on less favorable terms later; see Karl P. Mueller, Jasen J. Castillo, Forrest E. Morgan, Negeen Pegahi, and Brian Rosen, *Striking First: Preemptive and Preventive Attack in U.S. National Security Policy* (Santa Monica, CA: RAND Corporation, 2006), <https://www.rand.org/pubs/monographs/MG403.html>.

12. This is the “security dilemma.” See Robert Jervis, “War and Misperception,” *Journal of Interdisciplinary History* 18, no. 4 (Spring 1988): 675–700, <https://www.jstor.org/stable/204820>.

13. See David A. Baldwin, “The Power of Positive Sanctions,” *World Politics* 24, no. 1 (October 1971): 19–38, <https://doi.org/10.2307/2009705>. Theorists often like to argue about which of these policies is “really” deterrence—many people recoil at calling reward and reassurance measures “positive deterrence,” but some also pedantically insist that deterrence by denial or using economic punishment is not proper deterrence. The important thing to keep in mind is that all of these factors influence a state’s decision to go to war, so whether you choose to call them deterrence or not, they should all be taken into account in making deterrence strategy.

14. The converse is also true: states also often forgo opportunities to take military action in situations where war might well have served their interests, as in Britain’s refusal to go to war with Germany to defend Czechoslovakia in 1938.

15. Bernard Brodie, *Strategy in the Missile Age* (Princeton, NJ: Princeton University Press, 1959); George Quester, *Deterrence Before Hiroshima* (New York: Wiley, 1966); and Uri Bialer, *In the Shadow of the Bomber* (London: Royal Historical Society, 1980).

16. Most prominently, John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1983). See also John J. Mearsheimer, “Maneuver, Mobile Defense, and the NATO Central Front,” *International Security* 6, no. 3 (Winter 1981–82): 104–22, <https://www.jstor.org/stable/2538609>.

17. See Schelling, *Arms and Influence*, 18–24. By the same token, cyber deterrence (see Martin Libicki’s article in this issue) is also a realm of deterrence that is fuzzy around the edges but has many differences from noncyber deterrence. The case for “space deterrence” being a subject that can be useful to discuss in isolation from other deterrence is less clear-cut; see Karl P. Mueller, “The Absolute Weapon and the Ultimate High Ground: Why Nuclear Deterrence and Space Deterrence Are Strikingly Similar Yet Profoundly Different,” in *Anti-Satellite Weapons, Deterrence and Sino-American Space Relations*, ed. Michael Krepon and Julia Thompson (Washington, DC: Stimson, 2013), 41–59, http://www.stimson.org/images/uploads/Anti-satellite_Weapons.pdf.

18. During the Cuban Missile Crisis, President Kennedy famously declared his reluctance to order an invasion of Cuba because he did not want to be compared to Tojo. Among other things, this example serves as a reminder that deterrence outcomes are not simply driven by deterrers’ policies and actions.

19. See, for example, Adam Roberts, *Nations in Arms*, 2nd ed. (London: Palgrave-Macmillan, 1986).

20. The distinction is not always this clear-cut in practice. If an invader defines victory as defeating the enemy at low cost, threatening to make the cost of victory high can be seen as threatening to deny the attacker its objectives, though that phrase more often refers to territorial or political goals. Nevertheless, denial fundamentally involves threatening an attacker with frustration or disappointment, while punishment involves threatening to inflict pain or loss, regardless of whether those suffering are civilians or soldiers.

21. This dynamic is not unique to conventional deterrence. Smaller nuclear-armed states have based their deterrent strategies against superpowers on similar “marginal cost deterrence” principles. Britain or France could not credibly threaten to destroy the Soviet Union with

their modest nuclear arsenals, but they could threaten Moscow in the hope that Soviet leaders would not be willing to sacrifice their capital as the price for overrunning London or Paris. Charles de Gaulle called this the ability “to tear off an arm” of an attacker. See André Beaufre, *Deterrence and Strategy* (New York: Praeger, 1965).

22. Clausewitz, though he focused on compellence rather than deterrence, was an emphatic proponent of the importance of denial, which he often equated with disarming the enemy: “If the enemy is to be coerced you must put him in a situation that is even more unpleasant than the sacrifice you call on him to make. . . . [I]f you are to force the enemy, by making war on him, to do your bidding, you must either make him literally defenseless or at least put him in a position that makes this danger probable.” Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 77, 91–99.

23. Making good deterrence strategy depends on being clear about who is being deterred, from doing what, and under what circumstances, because no single, generic deterrence strategy will be well suited for every case. This has recently become known in some circles as “tailored deterrence,” but good deterrence has always been tailored.

24. Prior to the past century this last point was much less generally true because waging war had an air of virtue about it; see John Mueller, *Retreat from Doomsday: The Obsolescence of Major War* (New York: Basic Books, 1989). On the pervasive unpopularity of military action among financial sectors in all nations, see Jonathan Kirshner, *Appeasing Bankers: Financial Caution on the Road to War* (Princeton, NJ: Princeton University Press, 2007).

25. Christopher J. Fettweis, *Dangerous Times? The International Politics of Great Power Peace* (Washington, DC: Georgetown University Press, 2010).

26. A good point of entry is Stephen Van Evera, *Causes of War* (Ithaca, NY: Cornell University Press, 1999).

27. Mearsheimer quite properly characterizes this as a strong tendency rather than an absolute rule, but none of the cases he examines in *Conventional Deterrence* violates it.

28. *Conventional Deterrence* focuses on the Second World War and subsequent conflicts; on short-war expectations in 1914 see Van Evera, *Causes of War*; and Jack L. Snyder, *The Ideology of the Offensive: Military Decision Making and the Disasters of 1914* (Ithaca, NY: Cornell University Press, 1984).

29. David A. Shlapak and Michael Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics* (Santa Monica, CA: RAND Corporation, 2016), https://www.rand.org/pubs/research_reports/RR1253.html. Ground transit from Poland into the Baltic States would need to transit the narrow “Suwalki Corridor” between Belarus and Russia’s Kaliningrad exclave and naval transit from the western Baltic Sea would face a severe threat of interdiction from Russian land- and air-launched antiship cruise missiles. See Ben Hodges, Janusz Bugajski, and Peter B. Doran, *Securing the Suwałki Corridor: Strategy, Statecraft, Deterrence, and Defense* (Washington, DC: Center for European Policy Analysis, July 2018), <https://www.cepa.org/securing-the-suwalki-corridor>.

30. Remarks by President Obama to the People of Estonia, Tallinn, Estonia, 3 September 2014, <https://obamawhitehouse.archives.gov/the-press-office/2014/09/03/remarks-president-obama-people-estonia>: “Article 5 is crystal clear: An attack on one is an attack on all. So if, in such a moment, you ever ask again, ‘who will come to help,’ you’ll know the answer—the NATO Alliance, including the Armed Forces of the United States of America, ‘right here, [at] present, now!’ We’ll be here for Estonia. We will be here for Latvia. We will be here for Lithuania. You lost your independence once before. With NATO, you will never lose it again.” Sacrificing the Baltic States to their fate rather than trying to defend them in the event of an invasion might nevertheless be sound policy, but that is a debate that falls outside the scope of the present discussion.

31. Scott Boston and Dara Massicot, *The Russian Way of Warfare: A Primer* (Santa Monica, CA: RAND Corporation, 2017), <https://www.rand.org/pubs/perspectives/PE231.html>.

32. Regarding similar risks vis-à-vis the Soviet Union during the Cold War, see Barry R. Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Ithaca, NY: Cornell University Press, 1991).

33. Andrew Radin and Clinton Bruce Reach, *Russian Views of the International Order* (Santa Monica, CA: RAND Corporation, 2017), https://www.rand.org/pubs/research_reports/RR1826.html.

34. Such diversionary wars are not commonplace, but they certainly do occur; the Argentine invasion of the Falkland Islands in 1982 is a classic example.

35. It is worth noting that there is an important difference between saying (as here) that a low-probability event is worth hedging against and falling into the trap of trying to prepare for every contingency that it is possible to imagine, since the supply of the latter is virtually infinite. Many threats that are not literally impossible are nevertheless so unlikely that prudent policy makers should not expend significant resources preparing for them.

36. Scott Boston, Michael Johnson, Nathan Beauchamp-Mustafaga, and Yvonne K. Crane, *Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority* (Santa Monica, CA: RAND Corporation, 2018), https://www.rand.org/pubs/research_reports/RR2402.html.

37. Mearsheimer, *Conventional Deterrence*, 167–71.

38. Boston et al., *Assessing the Conventional Force Imbalance*, 7–9.

39. Shlapak and Johnson, *Reinforcing Deterrence*.

40. The magnitude of this would depend significantly on whether China decided to provide an economic lifeline to the Russians.

41. David Ochmanek, Peter A. Wilson, Brenna Allen, John Speed Meyers, and Carter C. Price, *U.S. Military Capabilities and Forces for a Dangerous World: Rethinking the U.S. Approach to Force Planning* (Santa Monica, CA: RAND Corporation, 2017), https://www.rand.org/pubs/research_reports/RR1782.html.

42. Ochmanek et al., *U.S. Military Capabilities and Forces*; and Shlapak and Johnson, *Reinforcing Deterrence*. The forces deployed to eastern Europe to date under the US European Deterrence Initiative and NATO's multinational Enhanced Forward Presence effort comprise two mechanized brigade equivalents. It is unclear whether the size and posture of these forces would be sufficient to fundamentally alter Russian expectations about their ability to achieve a *fait accompli*; see Elbridge Colby and Jonathan Solomon, "Facing Russia: Conventional Defence and Deterrence in Europe," *Survival* 57, no. 6 (December 2015–January 2016): 21–50, <http://doi.org/gd32rm>.

43. Mearsheimer, *Conventional Deterrence*, chap. 6.

44. Michael Kofman, "Fixing NATO Deterrence in the East or: How I Learned To Stop Worrying and Love NATO's Crushing Defeat By Russia," *War on the Rocks* (blog), 12 May 2016, <https://warontherocks.com/2016/05/fixing-nato-deterrence-in-the-east-or-how-i-learned-to-stop-worrying-and-love-natos-crushing-defeat-by-russia/>; and Karl P. Mueller, David A. Shlapak, Michael W. Johnson, and David A. Ochmanek, "In Defense of a Wargame: Bolstering Deterrence on NATO's Eastern Flank," *War on the Rocks* (blog), 14 June 2016, <http://warontherocks.com/2016/06/in-defense-of-a-wargame-bolstering-deterrence-on-natos-eastern-flank/>.

45. Much the same can be said of the failure to deter Saddam Hussein's invasion of Kuwait in 1991—or Iraq's failure in turn to deter American attack 12 years later.

The Future of Conventional Deterrence: Strategies for Great Power Competition

Robert P. Haffa Jr.

Abstract¹

The return of great power competition as described in the *2018 National Defense Strategy* suggests the need to reconsider the theories and strategies of Cold War conventional deterrence in a world of near-peer competition. The seminal questions become: Does deterrence have a future, and do the tenets of Cold War theory and practice apply to the era of emerging strategic competition? Indeed, deterrence, particularly conventional deterrence, does have a future. However, distinct strategic and force planning implications exist for adapting conventional deterrence to meet the challenges of great power competition.

* * * * *

Fundamental changes are occurring in the international political system and the future US role in that system. The declared policies enunciated in the recently published national security and defense strategies describe an environment in which global disorder, revisionist ambition, coercive diplomacy, and interstate strategic competition will provide plenty of opportunity and motivation for armed conflict while making threats and planning contingencies difficult to foresee. And although democracies may be unlikely to go to war against each other, the rise of illiberal democratic states, as seen in Eastern Europe and elsewhere, promotes neither domestic nor international tranquility. Within the current environment, the United States retains vital interests, and, despite

Robert P. Haffa Jr. is a retired Air Force colonel and nonresident senior fellow at the Center for Strategic and Budgetary Assessments. A graduate of the US Air Force Academy, he holds a doctorate in political science from Massachusetts Institute of Technology, teaches as an adjunct professor at Johns Hopkins University in Washington, DC, and serves as an advisor to *Strategic Studies Quarterly*. This article is an updated version of *Conventional Forces and the Future of Deterrence* (report, Third Annual Conference on Strategy, Army War College, Carlisle Barracks, PA, February 1992), 5–30.

some isolationist sentiments, it will remain fully engaged in pursuit of its foreign policy objectives while deterring threats to its interests.²

In deliberating on the role of conventional deterrence within US declared military strategy, the question becomes: Does deterrence have a future? Can we apply the tenets of Cold War theory and practice to this emerging strategic competition? There are some initial issues we must deal with in thinking about the future of conventional deterrence. Indeed, deterrence, particularly conventional deterrence, does have a future—but one very different from the way it was conceptualized and applied during the Cold War. The *2018 National Defense Strategy* states that “the central challenge to U.S. prosperity and security is the re-emergence of long-term, strategic competition. . . . China and Russia want to shape a world consistent with their authoritarian model—gaining veto authority over other nations’ economic, diplomatic, and security decisions.”³ This return of great power competition suggests the need to revisit the theories and strategies of Cold War conventional deterrence to this world of near-peer competition. Such an examination requires us to separate conventional deterrence from its Cold War past, when conventional threats of denial and reprisal were coupled with, if not subordinated to, those of theater or strategic nuclear weapons. This article briefly reviews the theoretical foundations of conventional deterrence and questions the application of that theory to US defense policy in consideration of a changed international political system and newly declared strategies. It then suggests the strategic and force planning implications of adapting conventional deterrence to meet the challenges of great power competition.

The Theoretical Foundations of Conventional Deterrence

As the United States encounters near-peer competitors in pursuing its global interests, the theories of deterrence developed as a guide to policy during the Cold War years require reexamination. In addition to the perceived success of those policies, deterrence goes to the heart of the central questions of international politics: How is military force applied to achieve political ends? In wielding the military instrument to influence other actors, how can wars be avoided? Although we have seen neither the end of history’s dialectical struggles nor the end of war, it is realistic as well as idealistic to continue to work toward an international system in which armed conflict becomes less probable, less destructive,

and less costly. And although some universal concept of deterrence to render war obsolete—that all parties might calculate negative cost benefit to the use of military force—may appear utopian at the end of mankind’s bloodiest century and into the first decades of its successor century, deterrence will remain an important way to exert US influence in the world and to dissuade would-be aggressors from challenging US objectives.

To think about applying concepts of deterrence, we need to define some terms and examine the formulation of classic deterrence theory as it has been applied to conventional deterrence. In its most general form, deterrence is simply the persuasion of one’s opponent that the costs and risks of a given course of action outweigh its benefits. The classic focus of deterrence theory has been on creating military capability to prevent taking aggressive military action. Thus, deterrence, for our purpose here, can be defined as “the manipulation of an adversary’s estimation of the cost/benefit calculation of taking a given action . . . thereby convincing the opponent to avoid taking that action.”⁴

Is this formulation of deterrence, fashioned in the nuclear age, still relevant? There was, as George Quester has described, deterrence before Hiroshima, but conventional deterrence theory as we have most recently known it was strongly influenced by the bipolar, nuclear, and conventional confrontation centered on US-USSR relationships during the Cold War.⁵ What can we learn from classic deterrence theory that applies to concepts of conventional deterrence in a very different world? To answer that question, we need to remind ourselves of some of the requirements, components, and critiques of deterrence theory.⁶

Components of Deterrence

The components of deterrence normally include capability, credibility, and communication.

Capability. Capability refers to the acquisition and deployment of military forces able to carry out plausible military threats to retaliate in an unacceptable manner or to deny the enemy’s objectives in an unaffordable way.

Credibility. As the declared intent and believable resolve to protect a given interest, credibility can be reinforced by force structure, proximity, and power-projection capability and must be evaluated through comparative analysis.

Communication. Communication involves relaying to the potential aggressor, in an unmistakable manner, the capability and will to carry out the deterrent threat.

These three requirements, formulated principally at the level of strategic nuclear deterrence, have also been applied to deterrent confrontations involving conventional forces. Moreover, in addition to these requirements, a considerable amount of theoretical work has been done to define and differentiate among the ways in which that theory might be applied.⁷ For example, we realize there is a difference between immediate deterrence (a potential attacker is actively considering the use of force, and the deterrer, aware of that threat, issues a counterthreat to deter) and general deterrence (the possibility of armed conflict is present, but the potential attacker is not actively considering the use of force to threaten the interests of the deterrer).

We understand the difference between basic (or Type I) deterrence (we are eyeball-to-eyeball with the adversary threatening our national survival) and extended (Type II) deterrence (in which the objective is to defend allies and friends from attack and is inherently less credible).

We also know the difference between strategic nuclear deterrence (the level at which the majority of the theorizing has occurred, at which the use of intercontinental thermonuclear weapons has been threatened, and at which deterrence is usually thought to have held) and conventional deterrence (the level that has received considerably less attention, at which, by definition, threats to use unconventional weapons of mass destruction are excluded and at which deterrence, arguably, has been prone to fail). An important distinction drawn during Cold War formulations of this dichotomy is subject to considerable question in the present environment. During the Cold War, the evolution of a “stalwart conventional defense” in Central Europe meant that the US and its allies could lessen their reliance on nuclear weapons to deter conflict. Thus, nuclear weapons became the instrument of deterrence by punishment, while conventional forces shouldered the burden of deterrence by denial. Whether that distinction should continue to hold in an era of long-term great power strategic competition is worthy of consideration.

Criticisms of Deterrence Theory

In either case, however, and despite the richness of this body of theory, classic formulations of deterrence, even in the purest of strategic

nuclear deterrence situations, have encountered considerable criticism.⁸ The most significant claims follow.

Uncertainty. Although it can be argued that nuclear deterrence worked during the Cold War, we do not know that for sure. It is very difficult to prove deterrent successes because that would require showing why an event did not occur. There is inherent uncertainty about the antecedent causes one cites in such cases, as other plausible factors can always be suggested.

Rationality. The emphasis on the rational calculation of the cost of a retaliatory response has also been faulted in deterrence theory. Decision makers who start wars may pay more attention to their own domestic needs or to other internal or external factors than to the military capabilities or options of their possible adversaries or to the potential severity of the outcome.

Stability. Deterrence theory has also been criticized for contributing to a spiral of conflict. The threat of retaliation may be so great and so destabilizing that, in times of crisis, it becomes in the aggressor's interest to preempt or escalate.

Failure. Deterrence at conventional levels has tended to "fail." However, proponents of conventional deterrence argue that the use of conventional military force does not necessarily equate to a failure of doctrine. Deterrence failures are not inconsistent with deterrence theory, provided they can be attributed to the absence of a clear commitment or to insufficient capability or credibility. On the other hand, because the risks of conventional conflict could be perceived as relatively modest, the costs of choosing to go to conventional war, even if the likelihood of attaining a military victory is granted little confidence, might be outweighed by perceived political benefits.⁹

Distinctions of Nuclear versus Conventional

The differences between the perceived costs and risks of nuclear versus conventional deterrence are important for our discussion. Bipolar nuclear deterrence has some special properties making its costs and risks relatively easy to calculate: two principal actors, well-defined strike scenarios, a finite number of weapons planned against a transparent target set, calculable losses under any plausible exchange. Calculations of plausible nuclear exchanges suggest that a survivable second-strike capability with assured destruction potential should allow deterrence to hold. However, past

attempts to conduct similar simulations at a conventional level, particularly when conventional deterrent strategies were often underpinned by theater or strategic nuclear weapons, have tended to make analysts and policy makers see conventional deterrence as less rigorous, far more context-dependent, and, ultimately, far more unreliable as a guide to strategy. That situation began to change in the mid-1970s, owing to what was referred to as a revolution in conventional military capabilities (e.g., space reconnaissance, global command and control, precision weapons, and stealth technology). The development and deployment of survivable conventional delivery platforms and very precise munitions suggested that conventional force had become more punishing, more usable, and, therefore, more credible.¹⁰

Evolution of Conventional Capability

Writing in *Foreign Affairs* after the first Gulf War, former Defense Secretary William Perry pointed to a “new conventional military capability” that “adds a powerful dimension to the ability of the United States to deter war.” Key to this new capability were “a new generation of military support systems”—intelligence sensors, defense-suppression systems, precision-guided munitions, and stealth technologies—that gave true and dramatic meaning to the term “force multiplier.” To avoid further such foreign entanglements in the future, Perry argued, the United States needs to use this newfound strength to deter future wars, not to fight them.¹¹

The continued evolution of US conventional capability since that time, as well as its demonstrated use and capability for long-range precision strike, enhances the theory of conventional deterrence for application in a world of great power competition. Suppose a potentially hostile power were to display an interest and a capability, if not an immediate intent, to encroach on or to directly attack American friends and allies or geographic regions or resources in which the United States has a major or vital interest. Such attacks might be deterred if that state calculates the results from prospective military action to be costly, problematic, and likely not to achieve the objectives sought—that is, if it perceived that the United States has the capability and credibility to defend that state, region, or interest; force the attacker to pay high costs; and deny that aggressor’s aims.

Therefore, many of those searching for a military strategy in a renewed great power competition might conclude that much of the conventional deterrence theory developed in the past is still relevant; the requirements of capability, credibility, and communication will continue to apply in the future. And while the central focus of contemporary deterrent relationships has become multipolar and less nuclear intensive, these were not relationships left unconsidered in the original development of the theory. It seems clear, therefore, that reinforcing the logic of conventional deterrence on its would-be adversaries should be a central concept of US defense policy over the next decade or so. The principal stumbling block in attempting to apply that deterrence theory to a coherent military strategy appears to be the tendency of conventional deterrence to “fail.” If conventional rather than nuclear forces are about to assume a prominent role in deterring great-power conflict, theoretical work now needs to be focused on the use or threatened use of conventional force. How can a policy of conventional deterrence be communicated and a supporting military strategy and force structure be shaped? One proposition, diametrically opposed to nuclear deterrence theory, is that a past “failure” of conventional deterrence may be a reinforcing, rather than a diminishing, factor: to communicate a credible deterrent threat, capable conventional military force must be demonstrated, exercised, and, at times, used.

Applying Deterrence Theory to Conventional Military Strategy

Deterrence theory fashioned during the Cold War may still prove helpful, but the implementation of deterrent strategy is likely to be considerably different. In other words, while the requirements of deterrence may be little changed, past formulations of conventional deterrence objectives, focusing on large ground armies facing each other across a central front, may become increasingly irrelevant (although such a confrontation may yet remain, as in Korea, and might emerge elsewhere, as in the Baltics). There have been important studies of conventional deterrence strategies in the past, but it is not clear that they are easily transferable to the deterrent problems of the future.¹² For example, in the nuclear deterrence studies of the Cold War, conventional deterrence has been seen as:

- an adjunct to containment of the USSR. That is, applied in a bipolar, nuclear setting and not generally applicable to less simple and less polarized crises.
- appropriate only in support of “symmetrical” approaches to containment to match the enemy’s moves at the level of provocation, for example, the “flexible response” policies of NATO. Asymmetrical responses (shifting the nature of one’s reaction into avenues better suited to one’s strengths against the adversary’s weaknesses) relied ultimately on threats of nuclear escalation.
- most valuable for its ability to buy time to resolve disagreements diplomatically and to bring hostilities to a halt.
- a defensive application of deterrence strategy. “Flexible response” in NATO Europe implied deterrence at all levels but could not be perceived as weakening the US nuclear deterrent. Conventional forces were politically restricted from preemptive or offensive options.
- deterrence by denial, that is, blocking the enemy’s military objectives through the attrition of his attacking forces. Deterrence by punishment, owing to the perceived limitations of conventional weapons in reaching over the battlefield to target the aggressor’s leadership and infrastructure, was left for nuclear weapons.
- a method of influencing an opponent’s political calculus of the acceptable costs and risks of his potential initiative, rather than threatening overwhelming punishment and societal destruction. Conventional forces did not provide the means to deter by force alone and had to be supplemented by diplomatic, political, and economic instruments.
- a means of extending deterrence to allies and friends, but ultimately dependent on the credibility of a US nuclear commitment. Conventional deterrence in Europe, for example, could not rely solely on the stationing of US troops there. They were only part of a multi-faceted deterrent that, in the end, relied on nuclear threats.

Because conventional deterrence during the Cold War relied on its coupling with nuclear capabilities, past military strategies of conventional deterrence, as outlined above, seem less relevant to the new world order than earlier deterrence theory might have promised. For example,

as the theory reminded us, most failures of conventional deterrence have resulted from a lack of credibility in the deterrent threat. Although capability may be evident and an interest communicated, the resolve of the deterrer is arguably the most difficult element of the deterrent equation to structure and to assess. Can the credibility of a conventional deterrent be enhanced for more effective application in the future? The requirements and applications of deterrence theory developed in the previous section suggest three areas of emphasis: (1) the visibility of the military force, (2) a documented record of willingness to use force in the past, and (3) the rationality of the use of force once deterrence has failed.

Visibility of Military Force

One of the critical requirements for deterrence has been substantial US forces deployed overseas, not merely as a symbol or a tripwire but as a significant military force to be reckoned with. If deterrence is to be extended, it must be seen to exist. The presence of US conventional forces probably acted as a restraint on the spread of nuclear weapons to our allies, unless they found our assurances incredible (France) or we lacked the in-place treaties and troops (Israel). A new military strategy based on conventional deterrence must pose a “virtual presence,” even in a period of US military retrenchment and overseas base closures. For future US conventional forces to deter, they must maintain some form of visibility to be perceived as credible and capable. To this end, small-scale exercises with rapid-reacting forces to Europe, as well as the European Defense Initiative stationing US troops in Eastern Europe could be helpful.

Willingness to Use Force

As noted above, conventional deterrence failures have not been inconsistent with deterrence theory, if failing could be attributed to the absence of a clear commitment or to insufficient credibility. Therefore, just as force visibility can be enhanced, so can force credibility through measures such as communicating a commitment, demonstrating resolve, and pointing to past uses of force. It may be that, owing in part to a past declaratory policy and practice of preferring diplomatic or economic instruments to the use of military force, or, even worse, backing away from a declared red-line, potential aggressors may not be persuaded that the United States will readily respond with force when its interests are threatened. To strengthen credibility, the use of force may be necessary in some cases for deterrence

to hold in other crises. In nuclear strategist Tom Schelling's words, "what one does today in a crisis affects what one can be expected to do tomorrow."¹³ Deterrence theory stressed that not being tough enough in a situation may bring peace only at the expense of one's image of resolve and, therefore, at the cost of long-term deterrence and stability.¹⁴

Rationality of the Use of Force

Somewhat ironically, despite its failures, conventional deterrence is theoretically more credible in terms of carrying out deterrent threats than is nuclear deterrence. That's because once nuclear deterrence fails, it may be irrational for the deterrer to respond to the challenge owing to the enormous destruction to his own society that may result. In the words of Paul Nitze, he may be "self-deterred."¹⁵ A conventional deterrent, however, can be made to appear more certain and, therefore, more credible: Rationality does not have to fail; the nation does not have to threaten to stumble into war to respond; doomsday forecasts do not have to be considered. In practice as well as in theory, there are more likely to be greater risks and uncertainties resulting from not carrying out a conventional deterrent threat than in acting to support declared policy. The operational implication of that theoretical principle is a strategy of conventional deterrence that allows for the likely use of military force—a plausible threat "that leaves something to chance."¹⁶

A central point of these arguments overlooked in past conventional deterrence theory is that the use of conventional force, presumed in the past to be a failure of conventional deterrence, can in the future be a major contributor to the deterrence of conventional conflict. If that is so, the problem now is that much on which the United States previously constructed its conventional deterrent is going away. US base structure overseas has been rapidly drawn down, and the United States is moving toward a smaller military relying on forward presence or small footprints rather than forward deployment, with attendant power projection shortfalls. The Army is no longer sized to conduct large-scale, sustained stability operations (let alone to confront a force-on-force scenario) but rather to carry out small-scale expeditionary missions against unconventional foes. This brings into serious question the ability of US strategy and forces to meet the requirements of capability, credibility, and communication. What military strategies are suited to match an

objective of conventional deterrence with fewer forces stationed abroad in fewer regions of interest and concern?

Strategies of Conventional Deterrence

When we consider the strategies of conventional deterrence dominating the Cold War years, we find them inadequate to meet the challenges of great power competition. For example, John Mearsheimer and others argued that the essence of conventional deterrence was being able to halt an enemy breakthrough that might lead to a successful blitzkrieg and military occupation of friendly territory. As military analysts focused on the European Central Front, however, there was considerable debate regarding which military strategy could best meet that deterrent requirement.¹⁷ These strategies included a conventional “tripwire” to demonstrate commitment but designed to fail quickly and rely on vertical escalation to deter; horizontal escalation (assuming direct conventional defense was beyond America’s reach, but deterrence could be strengthened by threatening the adversary’s other interests); or conventional direct defense (many defense analysts characterized as optimists or reformers argued that a direct conventional defense [and, therefore, deterrence] was possible with reforms or improvements in troop deployment, employment, strategy, and doctrine).

From several perspectives, none of these approaches appear particularly attractive when facing long-term competition with near-peer powers. Tripwire theories encourage nuclear threats and, perhaps, nuclear proliferation and fall into the same credibility traps of the past. Strategies of horizontal escalation are subject to the “spiral of conflict” critiques of deterrence as well as to the argument that other regions might not be nearly as valuable as the focus of primary conflict. The objective of conventional deterrence is to contain the conflict, not escalate it to a more global confrontation. Structuring a direct conventional defense, in the past considered the most reliable of deterrent strategies, is less plausible in the future owing to the retrenchment of US general purpose forces and the uncertain nature of the threat. Which, then, appear to be the components of a military doctrine, strategy, and force structure that will support the requirements of conventional deterrence with respect to new, powerful adversaries?

Simply put and based on the theoretical requirements that continue to hold, a conventional deterrent strategy must be both capable and

credible. If we delve more deeply into the requirements developed in the previous section and apply them to the problem of confronting great power competition, a theory of conventional deterrence should be constructed to possess the following characteristics.

General as opposed to immediate. Although the capability to invoke an immediate deterrent threat against a specific adversary must remain, the policy must be geared to a long-term strategic competition.

Extended as opposed to basic. This property has two components. First, the United States is not in danger of conventional attack on its homeland but is seeking a way to extend deterrence and defense to vital regions, resources, and interests. Extended conventional deterrence is far more credible, given current capability, than is extended nuclear deterrence, because it obviates the “trading Boston for Bonn” question. And although the United States will wish to maintain both strategic nuclear forces and theater nuclear power projection capability to deter nuclear powers and potential proliferators, it appears that limited strategic and theater missile defenses will gradually replace some of the assured destruction deterrence theories enshrined in the antiballistic missile treaty. Second, we need to differentiate a new conventional deterrent from Cold War strategy that was focused on a single region coupled with a flexible, nuclear response. In other words, although specific plausible contingencies must be considered in general purpose force planning, we are seeking a conventional capability that is strategic rather than theater-oriented. To be credible, that force must have prompt global reach and power projection capability.

Overwhelming, as opposed to gradual. Although we may wish to eschew the term massive conventional retaliation, this formulation of deterrence strategy is the antithesis of the graduated escalatory response characterizing the Cold War strategy of flexible response in which sudden and massive escalation (fearful of the next, nuclear step) was avoided at all costs. The purpose here is to terminate conflict rapidly and to do so by adding the element of punishment to conventional deterrence rather than relying on denial.¹⁸

Conventional as opposed to nuclear. It is in the interest of the United States to deemphasize nuclear weapons and systems, particularly as new confrontations with near-peer adversaries possessing strategic nuclear capabilities arise. Conventional deterrence in crises less than national survival can be more effective than nuclear deterrence, as its capa-

bility is enhanced by the certainty (therefore, credibility) of a response. One of the striking differences regarding the future of conventional deterrence, at least in the near term, is that the United States enjoys an enormous margin of global reach and power projection capability over any emerging conventional rival. Thus, the United States should not be self-deterred in a crisis, and the threat of use of conventional force, to include preemption, becomes more credible.¹⁹

Conventional deterrence in the post–Cold War world, then, requires supporting a military strategy and force structure that can be extended credibly to distant regions, quick in response, and decisive in application. Against near-peer adversaries, relatively small but very powerful, precise, intense, and survivable forces may be able to meet the theoretical requirements and strategic needs of extended conventional deterrence. If so, the properties that will characterize conventional deterrent strategy will be very different from those that defined it during the Cold War. A strategy of effective conventional deterrence must be decoupled from nuclear threats, asymmetrical in threat and application, intense and overwhelming in its threat, offensive with a capability for punishment as well as denial, and extended globally through advanced technologies and weapons systems.

Based on this analysis, the United States is faced with developing a military strategy of conventional use that can be extended to interests abroad and can be generally applied. The United States now requires the military strategy and forces to underwrite a theory of “general extended conventional deterrence.” Can it be done?

How to Get General Extended Conventional Deterrence

According to national strategies of security and defense, the United States is entering a new period of great power competition and is facing that confrontation following a time of strategic atrophy. Unfortunately, as defense resources have been compressed over the past decade, the list of US national security goals has not been reduced. The goals most relevant to the study of future conventional deterrence are as follows:

- Sustaining joint force military advantages, both globally and in key regions;
- Deterring adversaries from aggression against our vital interests;

- Maintaining favorable regional balances of power in the Indo-Pacific, Europe, the Middle East, and the Western Hemisphere;
- Defending allies from military aggression, bolstering partners against coercion, and fairly sharing responsibilities for common defense; and
- Dissuading, preventing, or deterring state adversaries and nonstate actors from acquiring, proliferating, or using weapons of mass destruction.²⁰

These national security objectives, although familiar, have been restructured to match a time of emerging great power competition. To that end, military planners are now receiving guidance that approximates the following:

- Plan an effective military campaign in a distant region (the Indo-Pacific, Europe, or the Middle East) to deter a sophisticated, near-peer adversary. That adversary may possess precision conventional weapons as well as unconventional (nuclear, biological, chemical) weapons and the capability to deliver those weapons within the region, adding to his anti-access, area denial capability.
- Plan to deploy continental US (CONUS)–based forces on very short notice. Although US forces may be present in the region, they will not be there in numbers enough to conduct a stalwart defense or successful counterattack without rapid CONUS reinforcement.
- Defeat the enemy quickly by denying his objectives and, as required, by punishing his war-making infrastructure. Do this with as few friendly casualties as possible, while minimizing collateral damage.
- Plan to do all this as quickly as possible, before public support dissolves or allied resolve weakens. Significant allied military contributions, except for indigenous forces in some contingencies, may not be available until later in the war.
- Hedge against the possibility of a second, simultaneous regional contingency by deterring opportunistic aggression elsewhere.

Can a strategy of general extended conventional deterrence, coupled with advanced military capabilities and technologies demonstrated during the Gulf War, the Iraq War, and the continuing counterterror/

counterinsurgency campaign in Afghanistan and elsewhere, meet such demanding guidance? That demonstrated resolve and capability, as Secretary Perry previously argued, suggests that the use of conventional force should be judged as an important element of establishing the credibility of a general extended conventional deterrent in future crises. A discrete yet overwhelming use of conventional force, narrowly seen as a deterrent failure if one focuses on a single crisis, can also be an important first step in the structuring of a new strategy of general extended conventional deterrence that may influence international relations and deter great power conflict in the future. There is plenty of work to be done if US military forces are to develop and sustain the capability of acting quickly and decisively in future contingencies to underwrite conventional deterrence. What kinds of capabilities and what sorts of forces are needed to underwrite a strategy of extended general conventional deterrence in a world of interstate strategic competition?

Strategic concepts and military planning guidance must be translated into force size and structure. There has been no effective substitute, during the Cold War and after, for sizing and shaping US military forces than the use of plausible, hypothetical contingencies to test the effectiveness and efficiency of those forces to deter and defeat an adversary. And because force planners tend to be a conservative lot, they generally choose to contemplate a worst-case scenario, under the assumption that forces sized for that contingency should be able to deal with less-intense conflicts as lesser-included cases. What, then, are the plausible contingencies featuring potential great power conflict to which force planners should turn their attention? In his consideration of the future of land warfare, Brookings analyst Michael O'Hanlon suggests two.²¹

In the case of Russia, an invasion threat to the Baltic States seems a reasonable place to start force planning for potential great power conflict. Although some opposed the expansion of NATO to states formerly included in the Soviet empire, the Article 5 mutual defense pledge of the NATO treaty requires the US and its allies to come to the defense of these frontline states. Although O'Hanlon notes that a Russian intervention in the Baltics could pursue several avenues, including tactics employed in Crimea and Ukraine, the most stressful scenario to plan against is the classic land invasion—reminiscent of planning contingencies employed during the Cold War. Notably, O'Hanlon starts from the premise that the US and NATO should not rely solely on nuclear deterrence here, as

Russian objectives may be limited. That premise results in the consideration of conventional force options to deter and, if necessary, defeat the invading land forces. Because NATO's rapid reaction force is likely to serve as only a tripwire, O'Hanlon develops a methodology, following Cold War conventional deterrence models, suggesting the need to deploy from 150,000 to up to 225,000 US troops to deter and defend against a Russian force that might approach 300,000. As in the Cold War, deterring conflict in Central Europe will depend heavily on the contributions of the allies. The strongest deterrent might be formed by the permanent stationing of large NATO air and land forces in the Baltics or by demonstrating an effective capability of rapid reinforcement.

In China's case, if we can put aside a reenactment of the Korean War in which Republic of Korea military forces act as a robust deterrent and Chinese intervention is questionable, a stressful contingency demanding different American force planning is a South China Sea scenario that spills over into Chinese threats to blockade Taiwan or seize islands in the Philippine archipelago. Here the militarization by China of islands in the South China Sea is particularly worrisome, as is the growing power projection capability of the People's Liberation Army and its increasing ability to deny US forces access and freedom of movement in the region. Deterrence in this case is likely to rely more on air- and sea-based forces rather than on land power. But if the US and its allies were to develop a containment strategy to deter potential Chinese adventurism in the region, a new network of bases might be established in the Philippines to enable air and sea superiority with attendant ground forces to defend these bases. As US forces are unlikely to be deployed to bases in Taiwan, this forward-deployed and carefully exercised force could also add to American pledges to defend Taiwan.

In postulating great power confrontation, the *2018 National Defense Strategy* has posed for the US military a task more difficult than the previous force planning construct of deterring and defeating two smaller regional adversaries nearly simultaneously. In addition to the planning factors noted above, a premium will be placed on the following roles and missions necessary to communicate a conventional deterrent capability.

Show of Force

With fewer US forces stationed abroad, the need to project forces quickly to demonstrate US commitment and resolve will remain im-

portant. Depending on the contingency, that force should be more than just the shadow of power; it will need robust, sustainable firepower.

Punitive Raids

To make a conventional deterrence credible, the United States must be able to strike multiple targets (200 or so to attack weapons sites, suppress enemy defenses, and take out command and control capabilities) simultaneously, across great distances, without seeking overflight, basing rights, or access to facilities from any foreign state and to conduct that raid with impunity.

Rapid Reaction

The need is for the rapid deployment of air, sea, and light ground forces with adequate air cover in support of commitment to allies faced with potential great power aggression.

Air Superiority

Air Force doctrine has long held that establishing air superiority is essential to allowing air-to-surface and surface warfare to be conducted successfully. This includes targeting key military facilities and command/control/communication infrastructure to blind the enemy and disrupt his ability to use and control his forces.

Halting, Delaying, or Disrupting a Cross-Border Invasion

In the early days of a potential great power conflict it may be necessary to bring in long-range airpower to deter the onrush of enemy ground forces and buy time for the arrival of ground and naval forces or for other diplomatic and military actions.

Parallel (or Simultaneous) Warfare

The ability to execute parallel warfare—that is, concurrently executing multiple operations at every level of an enemy's target set—will prove effective in both deterring and bringing the conflict to a rapid and decisive close while minimizing friendly casualties. Parallel warfare implies the ability to employ the overwhelming but precise use of military force needed to underwrite a strategy of general extended conventional deterrence.

In summary, to make viable a theory of conventional deterrence that can be extended to great power threats to US global interests, the United States will need to construct a coherent military strategy to defend those interests, ensure stability, and deter would-be aggressors from adventurism. It can be declared softly—if a big stick is nearby. Without the extensive forward deployment of US military forces that characterized the Cold War years, however, there will be a need for increased exercises and displays of power projection capability to demonstrate US global reach.

To that end, it is important to recall the boost to US conventional capabilities and deterrence brought about by the revolution in military affairs touted by Secretary Perry as an offset strategy—a conventional version of the first such strategy that wielded US nuclear prowess to offset perceived Soviet conventional superiority in Europe at the beginning of the Cold War. Although the Pentagon seems lately to have eschewed the phrase “third offset,” the components of that conventional strategy—advanced computing, big data analytics, artificial intelligence, autonomous unmanned systems, robotics, directed energy, hypersonics, and biotechnology—are specifically enumerated in the *2018 National Defense Strategy*.²²

Most importantly, the greatest departure from Cold War formulations of conventional deterrence theory is the idea that it will be necessary to use force to create deterrence. In that regard, the continued deployment and employment of US conventional forces overseas in Iraq, Afghanistan, and elsewhere in the prosecution of terrorists and insurgents well document that capability and credibility. But an unwillingness to use force, or to shy away from supporting US interests over concern of riling a would-be peer-competitor, will quickly squander any opportunity to dissuade. What needs to be avoided, as Professor Richard Betts argues, is “ambivalent deterrence: rhetorical bobbing and weaving rather than strategic planning.”²³ Conventional deterrence may break down on occasion, but such events can demonstrate the price of failure, rejuvenate its credibility, and contribute to a new period of stability. Declared and resourced appropriately, conventional deterrence can produce long cycles of stability instead of constant, overlapping intervals of conflict—something to be sought in a new era of great power competition.

Put in place, an accepted policy of general extended conventional deterrence is offered not only as a component of military strategy in a new security environment but also as a guide to planning the general-

purpose forces and capabilities the United States and its allies will need to underwrite that strategy. At the macro level, the implications for force planning for general extended conventional deterrence appear to be as follows:

For US Ground Forces

Under current guidance, the US Army (and Marine forces) are directed to develop and maintain the capacity for deterring and defeating aggression by a major power in a single large-scale operation while deterring opportunistic aggression elsewhere. In either case, a rapidly deployable, flexible contingency force with an emphasis on airborne, air assault, and light infantry forces will be required. Heavy mechanized forces can hedge against larger contingencies, but they may be diminished in role and size owing to the time it takes to deploy them from CONUS. Therefore, returning a heavy brigade to Europe seems a reasonable way of strengthening conventional deterrence in Central Europe. Prepositioning can be used to lessen deployment time to Eastern Europe, and strategic airlift will remain important to get the troops to the war on time.²⁴

For US Naval and Marine Forces

Power projection, rather than sea lane protection and control, will become the mainstay of US naval forces in underwriting conventional deterrence, and its geographic focus will increasingly become the Indo-Pacific region. The instruments of that task will remain the carrier battle groups and amphibious ready groups, augmented by attack submarines. As advanced by the Center for Strategic and Budgetary Analysis, “these naval assets are mobile, can defend and sustain themselves in proximity to an adversary, and have the offensive capabilities to deny and punish aggression immediately.”²⁵ A deterrence force composed of surface combatants, submarines, amphibious forces, and associated aircraft and unmanned systems would be capable of interdicting enemy naval forces, attacking coastal targets supporting aggression, or destroying valuable coastal targets to punish the enemy.

For US Air Forces

Just as strategic air forces were the centerpiece of the strategy of “massive retaliation” in the 1950s, so will they be in underwriting extended

conventional deterrence in the future. Long-range strategic bombers, particularly stealthy ones, will play an ever more important role in deterring great power conflict because they are stabilizing; can carry large, varied, precise payloads; can project heavy firepower on short-notice from US bases; and are both flexible and survivable. A proposed expansion in the number of Air Force squadrons from 312 today to 386 in the future would be a major contribution to conventional deterrence—particularly if the emphasis is placed on “bombers, tankers and command/control/communications/intelligence systems.”²⁶

The United States has a major role to play in ensuring stability and security in a new world order and possesses unique military capabilities to deter acts of aggression that would threaten that order. However, the conventional deterrence theories and strategies of the past that were subordinated to a bipolar strategic nuclear competition are neither relevant nor welcome. As Richard Betts warns, the concept of deterrence “has almost vanished from the vocabulary of strategic debate. U.S. policymakers need to relearn the basics of deterrence and rediscover its promise as a strategy.”²⁷ A coherent concept of general extended conventional deterrence can guide US military strategy in pursuit of a more stable and secure future international order and can guide prudent force planning in a time of great power confrontation. **SSQ**

Notes

1. For an introduction to post–Cold War US grand strategy choices, see Barry R. Posen and Andrew L. Ross, “Competing Visions for U.S. Grand Strategy,” *International Security* 21, no. 3 (Winter 1996/97): 5–53, <https://doi.org/10.1162/isec.21.3.5>. For a more recent analysis, see Robert P. Haffa, “Defense Decisions for the Trump Administration,” *Strategic Studies Quarterly* 11, no. 1 (Spring 2017): 25–48, https://www.airuniversity.af.mil/Portals/10/SSQ/documents/Volume-11_Issue-1/Haffa.pdf. For an historical look at grand strategy, see John Lewis Gaddis, *On Grand Strategy* (New York: Penguin Press, 2018).

2. US Department of Defense (DOD), *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, DC: DOD, 2018).

3. DOD, *Summary of the 2018 National Defense Strategy*, 4.

4. Austin Long, *Deterrence from Cold War to Long War* (Santa Monica, CA: RAND, 2009), 7, <https://www.rand.org/pubs/monographs/MG636.html>.

5. George H. Quester, *Deterrence Before Hiroshima* (New Brunswick, NJ: Transaction Inc., 1986).

6. Classical deterrence theory was developed in the 1950s and 1960s by a group of “first wave” deterrence theorists including Bernard Brodie, William Kaufmann, Herman Kahn, Thomas Schelling, and Jack Snyder, who assumed that states could be treated as unitary

rational actors. See Paul Stern, Robert Axelrod, Robert Jervis, and Roy Radner, "Deterrence in the Nuclear Age: The Search for Evidence," in *Perspectives on Deterrence*, ed. Stern, Axelrod, Jervis, and Radner (New York: Oxford University Press, 1989). See also Long, *Deterrence from Cold War to Long War*; and Fred Kaplan, *Wizards of Armageddon* (New York: Simon and Schuster, 1983). For an excellent research survey of conventional defense literature, see Charles T. Allan, "Extended Conventional Deterrence: In from the Cold and Out of the Nuclear Fire," *Washington Quarterly* 17, no. 3 (Summer 1994): 203–33, <https://doi.org/10.1080/01636609409443417>.

7. Patrick Morgan has called deterrence "the subject of one of the more elaborate attempts at rigorous theory in the social sciences." See Morgan, *Deterrence: A Conceptual Analysis* (Beverly Hills, CA: Sage Publications, 1977), 26. The following also relies on Paul K. Huth's definitions in *Extended Deterrence and the Prevention of War* (New Haven, CT: Yale University Press, 1988).

8. Among the more prominent of deterrence critics, from which this list is taken, are Robert Jervis, Richard Ned Lebow, and Janice Gross Stein. See their work, *Psychology and Deterrence* (Baltimore: Johns Hopkins University Press, 1985).

9. See Alexander George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974); and John Orme, "Deterrence Failures: A Second Look," *International Security* 11, no. 4 (Spring 1987): 96–104, <https://www.jstor.org/stable/2538838>.

10. See Barry Watts, *Six Decades of Guided Munitions and Battle Networks: Progress and Prospects* (Washington, DC: Center for Strategic and Budgetary Assessments, March 2007).

11. William J. Perry, "Desert Storm and Deterrence," *Foreign Affairs* 70, no. 4 (Fall 1991): 66–82, <https://www.jstor.org/stable/20044914>.

12. See John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1989), 211. The difficulty of separating conventional deterrence from its theater and strategic nuclear linkages is demonstrated in works such as those by Thomas Boyd-Carpenter, *Conventional Deterrence into the 1990s* (New York: St. Martin's Press, 1989); and Gary Guertner, *Deterrence and Defense in a Post-Nuclear World* (New York: St. Martin's Press, 1990).

13. Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), 63.

14. See Robert Jervis, "Deterrence Theory Revisited," *World Politics* 31, no. 2 (January 1979), 289–94, https://www.jstor.org/stable/2009945?seq=2#metadata_info_tab_contents.

15. Paul Nitze, "Deterring Our Deterrent," *Foreign Policy*, no. 25 (Winter 1976–77): 195–210, <https://www.jstor.org/stable/1148029>. Nitze argued that it would not be rational for the United States to respond with a countervalue nuclear strike after the USSR had launched an effective counterforce first strike on the United States, because of an assumed countervalue retaliation by the Soviet Union.

16. Thomas Schelling, *The Strategy of Conflict* (Boston: Harvard University Press, 1981).

17. See Mearsheimer, *Conventional Deterrence*; and Joshua Epstein, *Strategy and Force Planning* (Washington, DC: Brookings Institution Press, 1987), 6–7.

18. Perhaps practitioners of a new conventional deterrent should reread Henry Kissinger: "In my view, what appears balanced and safe in a crisis is often the most risky. Gradual escalation tempts the opponent to match every move; what is intended as a show of moderation may be interpreted as irresolution. . . . A leader . . . must be prepared to escalate rapidly and brutally." Henry Kissinger, *The White House Years* (Boston: Little, Brown and Co., 1979), 621.

19. Caution applies when declaring an American ability to project power against near-peer competitors owing to what have been termed the anti-access/area denial capabilities of potential adversaries. See Andrew Krepinevich, Barry Watts, and Robert Work, *Meeting the*

The Future of Conventional Deterrence: Strategies for Great Power Competition

Anti-Access and Area Denial Challenge (Washington, DC: Center for Strategic and Budgetary Assessments, 2003).

20. See DOD, *Summary of the 2018 National Defense Strategy*, 4.

21. Michael O'Hanlon, *The Future of Land Warfare* (Washington, DC: Brookings Institution Press, 2015), 82–90 and 104–8.

22. DOD, *Summary of the 2018 National Defense Strategy*, 3. For the “third offset,” see Robert Martinage, *Toward a New Offset Strategy: Exploiting U.S. Long-Term Advantages to Restore U.S. Global Power Projection Capability* (Washington, DC: Center for Strategic and Budgetary Assessments, 2014).

23. Richard K. Betts, “The Lost Logic of Deterrence,” *Foreign Affairs* 92, no. 2 (March/April 2013): 97, <https://www.foreignaffairs.com/articles/united-states/2013-02-11/lost-logic-deterrence>.

24. Michael O'Hanlon, *The \$650 Billion Bargain* (Washington, DC: Brookings Institution Press, 2016), 46–48.

25. Bryan Clark, Peter Haynes, Jesse Sloman, Timothy Walton, *Restoring American Seapower: A New Fleet Architecture for The United States Navy* (Washington, DC: Center for Strategic and Budgetary Assessments, 2017).

26. Michael O'Hanlon, “What We Can Learn from—and Add to—the New Air Force Vision,” *Order from Chaos* (blog), 17 September 2018, <https://www.brookings.edu/blog/order-from-chaos/2018/09/17/what-we-can-learn-from-and-add-to-the-new-air-force-vision/>.

27. Betts, “Lost Logic of Deterrence,” 99.

Book Essay

Does Grand Strategy Matter?

Alexander Kirss

Abstract

The key debate among contemporary academics over grand strategy pertains to what grand strategy the country should follow: whether the United States should engage in restraint, deep engagement, or liberal hegemony. Recent work has pushed back against the consensus that grand strategy matters. It questions whether academics and policy elites place too much stock in grand strategy as a cure-all for American foreign policy woes. This essay evaluates these pessimistic claims regarding both historical and contemporary grand strategy.

On Grand Strategy by John Lewis Gaddis. Penguin Press, 2018, 368 pp.

Emergent Strategy and Grand Strategy by Ionut Popescu. Johns Hopkins University Press, 2017, 233 pp.

The End of Grand Strategy by Simon Reich and Peter Dombrowski. Cornell University Press, 2017, 238 pp.

The Guardians by Susan Pedersen. Oxford University Press, 2015, 571 pp.

The American foreign policy elite has long displayed a curious fascination with “strategists,” larger-than-life figures whose reputation rests on their purported ability to confidently answer the most important—and difficult—questions regarding diplomacy and statecraft.¹ Although

Alexander Kirss is a doctoral candidate in political science at George Washington University and doctoral candidate in residence at the Institute for Security and Conflict Studies. He earned a master of arts degree in international relations from the University of Chicago.

guilty of similar hagiographic impulses at times, scholars have traditionally eschewed studying individual strategists in favor of strategy writ large.²

Where academics and policy elites have generally agreed, though, is that strategy, particularly grand strategy, “matters” when it comes to the conduct of foreign policy. Commentators therefore consistently explain foreign policy failure as the result of a lack of strategic planning and imagination. Virtually all modern presidents, including Barack Obama³ and Donald Trump,⁴ have therefore been upbraided for either failing to enact a grand strategy or enacting a strategy that was not to a particular commentator’s liking.⁵ The key debate among contemporary academics over grand strategy pertains to what grand strategy the country should follow, not whether it needs a strategy. Arguments over whether the United States should engage in “restraint” when it comes to foreign policy or embark upon a grand strategy of “deep engagement” or “liberal hegemony” have filled op-ed pages and bookshelves.⁶

A more recent wave of scholarship, however, has pushed back against the consensus that grand strategy matters. It questions whether academics and policy elites place too much stock in strategy, particularly grand strategy, as a cure-all for American foreign policy woes.⁷ More generally, it argues that the complexity of the modern world precludes the conceptualization of a single, uniform grand strategy that would be responsive to the full range of threats a country faces. Even if such a strategy is conceivable, it would be difficult, if not impossible, to implement.

This essay evaluates these pessimistic claims regarding both historical and contemporary grand strategy. It reviews several recent books on grand strategy that collectively illustrate many of the problems with the existing academic and policy consensus that grand strategy “matters” when it comes to conducting a successful foreign policy. These works are part of a broader critique of the concept of grand strategy writ large.

First, this essay defines the concept of grand strategy before moving to the central question of whether grand strategy “matters.” It explicates recent criticisms of grand strategy, namely that it won’t inevitably lead to foreign policy success, and how there is friction between grand strategy and operational demands. Looking to the past, it highlights a particularly interesting case of grand strategic blowback, when a successfully executed grand strategy results in unanticipated negative results. The League of Nations has often been seen as a failure due to its inability

to prevent the rise of fascism in Europe that culminated in the Second World War. Recently, however, historians have rethought the League of Nations' record, noting how certain branches of the League, such as the Permanent Mandates Commission (PMC), were surprisingly successful in enacting change in the international system. Even more importantly, they were able to do so contrary to the geopolitical interests of their purported great power masters. The essay concludes with opportunities for future research regarding grand strategy.

Defining Grand Strategy

What is grand strategy? Scholars, commentators, and policy makers have laid out a series of competing, and at times incommensurable, definitions. Barry Posen's seminal definition of the concept, dating from the early 1980s, remains a touchstone for many later writers. Grand strategy, for Posen, is "that collection of military, economic, and political means and ends with which a state attempts to achieve security." It is "a political-military, means-ends chain, a state's theory about how it can best 'cause' security for itself."⁸ Similarly, for Hal Brands, grand strategy is "an integrated scheme of interests, threats, resources and policies" that represent a "conceptual framework that helps nations determine where they want to go and how they ought to get there."⁹

Recently, Nina Silove has argued that differing conceptions of grand strategy can be grouped according to whether scholars see such strategies as a plan for action, a set of theoretical or organizing principles, or a pattern of behavior.¹⁰ There is therefore no "true" definition of grand strategy but rather a series of equally justifiable conceptions. While Silove's typology goes a long way towards rectifying the muddled state of defining grand strategy, it unfortunately skews towards relativism. Silove's categories are incredibly broad, and she doesn't provide enough direction towards determining the difference between helpful and unhelpful definitions of grand strategy.

When scholars adopt overly broad definitions of grand strategy, they are not only engaging in inappropriate "concept stretching," they risk fundamentally misstating what grand strategy represents.¹¹ For instance, otherwise distinguished historian John Lewis Gaddis gravely errs in how he conceptualizes grand strategy in his most recent book, *On Grand Strategy*. Gaddis defines grand strategy, generally, as "the alignment of potentially unlimited aspirations with necessarily limited capabilities."

Regarding when strategies should be considered “grand,” he notes that “it has to do . . . with what’s at stake Strategies become grander even as they remain within the beholder’s eye.”¹² This definition appears unsatisfying.

As Silove and others have noted, grand strategies do not need to be limited to the realm of international security. Nor do they need to be located at the level of states. Individual leaders, for example, may hold unique grand strategic views.¹³ Gaddis’s definition, however, strips away all aspects of grand strategy that would help differentiate it from strategic certainly have potentially unlimited aspirations, perhaps including winning a championship, becoming the best player of their generation, and earning endorsements to augment their salary. If they match their limited capabilities to achieving these goals, would Gaddis say that they possess a grand strategy? Even if he would, should scholars and policy makers follow him down this path?

Frustratingly, Gaddis makes clear that his goal in writing the book is not to contribute to scholarly discourse on grand strategy or international politics. Rather, he is seeking to distill for a popular audience the strategic insights he has acquired during the course of a long career at Yale University. Specifically, he seeks to replicate the wisdom he has taught to undergraduates in his renowned seminar on grand strategy. Gaddis notes in the preface that because he “seek[s] patterns across time, space and scale,” he feels “free to suspend” the “constraints” of conventional scholarship in order to place a bafflingly large array of thinkers, both historical and contemporary, in conversation with one another.¹⁴ His introductory chapter therefore whiplashes the reader between a startling array of figures, from Xerxes to Isaiah Berlin, Tolstoy to Herodotus, Philip Tetlock and Daniel Kahneman to F. Scott Fitzgerald. Gaddis essentially requires an incredibly broad definition of grand strategy to match his ambition in trying to link such otherwise disparate individuals. In doing so, however, he ensures that he won’t be able to formulate an argument about grand strategy that will be intelligible to either scholars, commentators, or policy makers who are already familiar with the topic. In that respect, *On Grand Strategy* is unfortunately similar to the work of Charles Hill, Gaddis’ colleague in the grand strategy program at Yale, who embarked upon a similarly ill-conceived attempt to read works of fiction alongside grand strategy in *Grand Strategies: Literature, Statecraft, and World Order*.¹⁵

On Grand Strategy might optimistically be read as a window into how Gaddis thinks. It takes a meandering, mostly thematic route through a variety of topics such as Athenian democracy; Caesar's mentorship of his successor, Octavian; and the interplay between religious belief, nationalism, and the motivating power states have over their citizens. The connection between these topics and grand strategy, however, is thin to say the least. That is not to say that there is no value to Gaddis' analysis. Indeed, at times Gaddis touches on incredibly interesting questions, for instance regarding the role of individual leaders in determining a state's strategic direction. By clothing his analysis in frivolous, cryptic anecdotes that bounce aimlessly across time periods and characters, however, Gaddis ensures that such questions remain unanswered. This is incredibly disappointing, since Gaddis' work on US grand strategy during the Cold War, *Strategies of Containment*, and his seminal biography of George Kennan, for which he won the Pulitzer Prize, remain enduring classics.¹⁶ *On Grand Strategy*, in contrast, appears by comparison a cheap self-help book designed to capitalize on Gaddis' hard-earned scholarly acclaim rather than a serious attempt at scholarship.

Does Grand Strategy Matter?

Although debates about the appropriateness of individual definitions of grand strategy are important, they are far less so than answering the question of whether grand strategy matters for the conduct of foreign policy. In his recent book, *Emergent Strategy and Grand Strategy*, Ionut Popescu argues that most academics and policy makers ascribe to what he terms the "grand strategy paradigm," whereby foreign policy success or failure is determined by whether a state possesses the correct grand strategy. In other words, if a state engages in logically sound strategic thinking—and can implement that thinking by linking it to strategic planning, force deployment, and operational action—it is more likely to have a successful foreign policy.

In contrast, however, Popescu believes that this grand strategic faith is woefully misplaced. In his reading of history, US presidents have rarely succeeded by adhering to a single, unchanging strategy. Rather, the most successful foreign policy presidents were flexible enough in their strategic thinking to respond to shifting circumstances and adapt their views and beliefs to the changing world.

Popescu's main theoretical insight is to import the notion of "emergent strategy" from the business world into international relations. In contrast to the grand strategy paradigm, emergent strategy allows strategy to evolve as a process rather than, as with grand strategy, being "fully formulated in advance."¹⁷ Policy makers are therefore free to learn from past experiences and adapt their thinking as they receive new information when embracing an emergent strategy. Having delineated this alternate approach to strategic planning and execution, Popescu then tests whether following a grand strategy or emergent strategy process leads to greater foreign policy success across presidential administrations during and following the Cold War.¹⁸ He concludes, contrary to conventional wisdom, that presidents will generally be more successful with their foreign policy when they follow an emergent strategy as opposed to grand strategy approach.

The argument, as a whole, is sound, and Popescu should be lauded for moving beyond the current debate over which grand strategy the United States should adopt to successfully challenge the grand strategy paradigm itself. Nevertheless, three major issues stand out with his analysis. First, Popescu is skirting a straw man argument in constructing his grand strategy paradigm. The point of differentiation between grand strategy and emergent strategy is clear; the former is reliant on advance deliberation, the latter in improvisational adaptation. It would be unfair, however, to argue that any strategic adaptation is evidence of an emergent strategy and that to qualify as a grand strategy there can be no improvisation or strategic adjustment whatsoever. Popescu, to his credit, recognizes this issue. He therefore notes that "proponents of Grand Strategy of course allow for some degree of learning and adaptation during the course of implementing one's plans."¹⁹ This ecumenical impulse, however, is somewhat lost in his empirical analysis, where the difference between tactical adaptation, which is allowed under the grand strategy paradigm, and strategic adaptation, which is not, risk being conflated.

Second, Popescu's empirical approach leaves a lot to be desired. Although he does a good job of identifying moments where presidential administrations adopt either a grand strategy or emergent strategy approach, Popescu falters somewhat when it comes to identifying whether foreign policy success or failure is the direct result of this choice. Among other issues, it is often difficult to clearly code a president's foreign policy as successful or unsuccessful. How, for instance, should one judge the

success of the US invasion of Afghanistan following September 11th? Although the United States has clearly spent tremendous amounts of money for little strategic benefit, it has also not seen Afghanistan emerge as a new haven for terrorists dedicated to striking at the homeland. The legacy of the Vietnam War also bears re-evaluation. Although clearly a strategic quagmire at the time, the war did not significantly hamper the United States' eventual triumph in the Cold War or preclude the establishment of positive economic and security cooperation in modern times.

Popescu also has a problem when it comes to controlling for alternate explanations for foreign policy successes or failures. Certainly grand versus emergent strategy is not the only factor which will determine whether US foreign policy is successful or not. There could be any number of additional causes, such as US domestic politics, the international balance of power, or the state of military technology to name but a few. His qualitative empirical approach does a poor job of controlling for these factors.²⁰ Furthermore, the counterfactuals he uses for his inferences are often unclear. For example, Popescu codes Harry Truman's administration as primarily engaging in an emergent strategy approach. What, however, would a Truman doctrine based on a grand strategy approach looked like? Would it have perceptibly altered the outcome of Truman's foreign policy? There is no obvious answer to either question.

A final point of criticism regarding Popescu's analysis is his reliance on large scale strategic reviews such as National Security Council documents and, more recently, the regularly mandated *National Security Strategy*, for coding the content of an administration's strategic thinking. While these documents are certainly important, it is not clear that they should be the only, or main, source of evidence for an administration's strategy. This is chiefly because these strategic documents oftentimes have little direct influence on resultant strategic planning or operations. The *National Security Strategy*, for instance, primarily influences the material acquisition process rather than operational planning.²¹ Popescu, therefore, could have done a better job by relying on alternate sources for his determination of the content of each administration's strategic approach.

Simon Reich and Peter Dombrowski share Popescu's distaste for the grand strategy paradigm in their recent book *The End of Grand Strategy*, but they attack it from a different theoretical position. Their major contention is that grand strategies are ineffective because they do not align

with the operational demands that militaries face in an increasingly complex and interconnected world. “The notion of a grand strategy,” they write, “entails the vain search for order and consistency in an ever-more complex world.” More specifically, “the very idea of a single, one-size-fits-all grand strategy has little utility in the twenty-first century. Indeed, it is often counterproductive.”²² There are two major reasons why this is the case. First, the proliferation of new threats means that a grand strategy can’t guide operations. Second, and related, operational demands will mean that bureaucratic politics will inhibit the successful implementation of a grand strategy.

Empirically, Reich and Dombrowski look to the present rather than the past, centering their critiques in the current operational challenges that the US Navy faces. They therefore analyze how operational demands are misaligned to grand strategic dictates in the Persian Gulf and Arctic Ocean, the execution of multilateral military exercises, the suppression of pirates, and the interdiction of nuclear weapons technology and drug trafficking. While the broad strokes of Reich and Dombrowski’s theoretical argument are thought provoking, it is their descriptive empirical analysis that stands out for its concision and clarity. Any one of their empirical chapters could serve as a high-level primer on the topic it discusses. Their discussion of multilateral exercises in the Asia-Pacific and Indian Ocean, for example, is incredibly well suited as an introduction to contemporary security challenges, such as the disinclination of China from the most recent iteration of the Rim of the Pacific (RIMPAC) exercises.²³

As helpful as their descriptive analysis is, though, Reich and Dombrowski’s case studies also reveal a potential disconnect regarding the level of their analysis. Grand strategy, as its name implies, is primarily located at the strategic level of analysis. This level is often contrasted with the lower operational level of analysis that forms the basis of their empirics.²⁴ Grand strategy proponents may be tempted to cry foul when Reich and Dombrowski shift their level of analysis from the strategic level in their theoretical critique to the operational level in their empirical analysis. This criticism, however, would be misplaced, since this disconnect represents Reich and Dombrowski’s core dissatisfaction with the concept of grand strategy. It is precisely the friction between the strategic and operational levels which drives strategic inefficiency and operational dysfunction.

A more potent critique is that Reich and Dombrowski's theory is underdeveloped and essentially untested, in so far as they fail to clearly lay out the consequences of this friction and align them to their empirical cases. For example, the first major consequence they identify, that grand strategies do not provide operational direction, is rendered moot if operational strategy exists to help guide military officers. Conversely, if the major consequence is the difficulty of implementing a grand strategy that conflicts with operational demands, then Reich and Dombrowski should have spent more time identifying what the conflict is and how it plays out in the bureaucratic arena.

A second problem of Reich and Dombrowski's argument is that many of the operational demands that they identify, for instance drug trafficking and piracy, do not represent a direct security threat to the United States. Many grand strategy scholars, such as Barry Posen, John Mearsheimer, and Stephen Walt, argue that such low-level security issues are essentially outside the scope of grand strategy.²⁵ For them, the fact that grand strategies do not provide operational guidance is a feature, rather than a bug, since it concentrates the military's focus on core, rather than peripheral, security interests. Reich and Dombrowski's argument would therefore be outside the scope of their grand strategic arguments.

This challenge, however, is less serious than it might appear. Reich and Dombrowski can firstly argue that Posen, Mearsheimer, Walt, and others are wrong to restrict grand strategy to core national security interests. Secondly, they can, and do, try to link what might appear to be peripheral strategic interests to core geopolitical conflicts. They note, for example, that the United States might have an interest in maintaining a naval presence in the Persian Gulf as a way to manage the global threat that China poses. A robust presence in the Persian Gulf might be able to prevent the flow of oil to China in any future conflict, limiting its military effectiveness.²⁶ Unfortunately, however, these geopolitical linkages remain underdeveloped throughout the course of the book.

When Grand Strategy Goes Wrong

Whereas many authors have argued that foreign policy failure occurs because of a lack of strategic thinking, far fewer have documented the phenomenon of grand strategic blowback, where policy failure occurs despite the otherwise successful implementation of a grand strategy.

Susan Pedersen provides a gripping, if perhaps unconventional, account of how these unforeseen consequences can arise in *The Guardians*, her monumental history of the League of Nations's Permanent Mandates Commission (PMC).

Scholars often see the League of Nations as an abject failure. Not only was it unable to prevent the rise of fascism in Europe in the lead-up to World War II, but it furthermore helped perpetuate colonial injustices across large swaths of the globe. Nevertheless, even as the United States never joined the League, it formed a central part of the grand strategies of the major continental European powers, most notably England and France. Although they may not have been the primary advocates for the League during its initial formulation, the great powers begrudgingly accepted its creation, perhaps believing that they would be able to mold it to serve their needs.

Pedersen convincingly demonstrates that these beliefs were foolish. Rather than an empty shell or a simple reflection of great power interests, the League of Nations, and the PMC in particular, had a strikingly unanticipated yet powerful effect on the conduct of world politics that ran counter to, rather than alongside, the desires of the large European states. Specifically, Pedersen demonstrates how the PMC was able to subtly, but decisively, shift international norms regarding imperial conquest and colonialism, therefore laying the groundwork for the eventual dissolution of the great European empires.

Beginning her story with the infamous Paris Peace Conference that ended the First World War, Pedersen chronicles the mix of idealism and realism that led to the creation of the mandates system, a process whereby fully industrialized states would be tasked with overseeing a mix of former German colonies and the remnants of the defunct Ottoman Empire. Importantly, these mandatory powers would not be allowed to integrate the mandates as direct colonies. Rather, they were tasked with guiding the political and economic development as a benevolent administrator.

Tracing the evolution of the mandates system throughout the interwar period, Pedersen varies her narrative between the operation of the PMC, the formal league apparatus tasked with keeping tabs on the mandates, and the administration of the mandates themselves across the Middle East, Africa, and South Pacific. She can therefore contrast the surprisingly tight cast of former European diplomats and colonial of-

ficials located in Geneva who formed the actual commission with their variable allies and opponents in European colonial ministries and the mandated territories. More than just a chronological narrative, however, Pedersen interjects taut discussions about the common themes the PMC was forced to adjudicate, such as the standing of persons in the mandates to petition the PMC, the role of the mandatory powers in sparking economic development, and the thorny issues of sovereignty and eventual independence. She furthermore makes sure to illustrate these themes with the key historical events that defined relations between indigenous populations in the mandates and the mandatory power, including the Syrian revolt against French authority from 1925 to 1927, the Mau movement in the South Pacific, and the fraught negotiations over the future of Palestine.

Pedersen's work will unquestioningly remain the definitive history of an underappreciated, yet incredibly important, experiment in international governance far into the future. Nevertheless, it is understandable that such a monumental work will itself contain some inconsistencies and problematic areas. First, it is clear that Pedersen is wrestling throughout the course of the book about how to convincingly, yet honestly, argue for the overall impact of the PMC. She settles upon a not wholly satisfying—and decidedly counterintuitive—conclusion. Rather than directly influencing the conduct of imperial powers, she maintains, the PMC had an indirect impact through shifting discourse about imperialism and beliefs about the appropriate relationship between European states and colonized peoples. To complicate this story further, she notes that the members of the PMC themselves were not particularly liberal or anti-imperialist. Rather, their single-minded devotion to strict textual interpretation and fervent, if patronizing, belief in the civilizing mission of mandates led to the unintentional delegitimation of more coercive colonial relationships. Although Pedersen ably demonstrates the effects of the PMC, it is difficult to fully comprehend how it could have such a large effect given that virtually none of the major actors intended for such a result to occur.

The lack of a clear counterfactual to weigh against the PMC's purported effect further complicates matters. What would have been the trajectory of imperialism if the PMC and the mandates system hadn't existed? It certainly seems plausible that European powers would have simply absorbed the mandated territories into their existing empires.

Conversely, however, Pedersen herself acknowledges that much of the effect of the PMC could also be attributed to the existence of the League as a whole and the ideals embedded in its covenant.²⁷ Even absent a mandate system, therefore, the legitimacy of colonialism may still have decreased during the interwar period. She also notes how nongovernmental organizations such as the Zionist Organization, the Anti-Slavery Society, and various diaspora populations played a central role in shifting public opinion against both the mandate system and colonialism in general. Pedersen could have done a better job of differentiating the mechanisms whereby the PMC, as opposed to these other bodies, impacted global opinion.

Finally, Pedersen's otherwise admirable impartiality can become problematic when she documents some of the worst atrocities visited by mandatory powers upon the populations under their care. For the bulk of her narrative Pedersen adamantly refuses to take sides regarding the morality or immorality of individual actors. She therefore consistently, albeit calmly, details the discriminatory, racist underpinnings of the mandate system but reserves ultimate judgment on it. She furthermore attempts, to the best of her ability, to allow under-represented native views to speak. Her aloof position, however, is challenged when confronted with unquestionably immoral behavior. To cite but one example, Pedersen errs when discussing the practice of British adventurers in the South Pacific indiscriminately killing native islanders and paying for sex with local women. Pedersen attempts to recover the agency of native women, noting that by engaging in transactional sex they discovered that the British were not gods or spirits, but rather men.²⁸ Interrogating the complexities of these relationships and other imperial interactions is important. Still, although clearly not her intent, Pedersen at times comes dangerously close to minimizing or justifying the violence of the mandate system.

Whither Grand Strategy?

What direction should future research on grand strategy take? The chorus of skeptical scholarly voices is likely to grow as grand strategy advocates have yet to formulate convincing counterarguments. There are also additional inconsistencies in grand strategy arguments that remain underexploited. For instance, the main arguments in the prescriptive debates over US grand strategy remain at best woefully underspecified

and at worst indeterminate. Similar to the problems with Popescu's arguments regarding emergent strategy, theories of grand strategy often omit key causes that could function as alternate explanations for their documented outcomes.

Additionally, grand strategy advocates sometimes curiously censor the types of outcomes that they attempt to explain. For example, advocates of restraint often highlight how adopting their preferred grand strategy will decrease the number of wars the United States will be involved in. Advocates for deep engagement, however, counter that the overall number of wars in the international system will likely increase under restraint, a question where restraint advocates are noticeably silent.²⁹ By highlighting some implications of individual grand strategies and not others, scholars fail to lay out the full consequences of adopting any individual strategy and make direct comparisons between competing strategies difficult. At worst, this could indicate cherry-picking outcomes that fit their arguments best. Not only does this selective reporting risk charges of bias, but also it conceals that the theories may not be determinate, that is lead to one clear prediction such as success or failure.

Future work on grand strategy should also look toward midrange theories of grand strategy rather than the current emphasis on broad depictions of foreign policy success or failure. Amid a larger move toward midrange theory in the study of international relations,³⁰ grand strategy scholars would benefit from articulating the relationship between grand strategy and a variety of other aspects of domestic and international politics rather than continually rehashing underdeveloped prescriptive debates. Thomas Oatley's recent work on the relationship between US grand strategy and domestic financial crises represents a prime example of the potential value of such midrange theories.³¹

Finally, grand strategy scholars should better articulate and test the mechanisms that link variation in grand strategy to potential outcomes. For instance, when advocates of restraint argue that a strategy of deep engagement costs the United States more since it incentivizes "cheap-riding" by US allies, they fail to provide convincing evidence either that allies truly are cheap-riding or that the US is spending more as a result. Without adequate counterfactual baselines for either allied or US defense spending, these mechanisms are not fully evidenced.³² Amidst the potential rise of future great power competitors and an influx of funding for research on grand strategy, debates over the importance of grand

strategy will certainly persist in the foreseeable future. These arguments will be greatly enriched if, rather than simply repeating the consensus view that grand strategy “matters” for the conduct of foreign policy, participants seriously engage with the growing skepticism of the concept. **SSQ**

Notes

1. See for instance, the lionization of Henry Kissinger long past his governmental prime. A recent profile lauds him as “the most consequential and controversial American foreign-policy maker of the past several decades (or maybe ever),” and he has been a frequent informal advisor to the presidential administration of Donald J. Trump. Jeffrey Goldberg, “The Lessons of Henry Kissinger,” *The Atlantic*, December 2016. See also Niall Ferguson, “The Meaning of Kissinger: A Realist Reconsidered,” *Foreign Affairs* 94, no. 5 (October 2015): 134–43. For a contrasting view of Kissinger’s legacy, see the roundtable in *Politico Magazine* entitled “Henry Kissinger: Good or Evil?,” *Politico Magazine*, 10 October 2015.

2. There has been a proliferation of recent scholarly works on grand strategy, such as Hal Brands, *What Good Is Grand Strategy? Power and Purpose in American Statecraft from Harry S. Truman to George W. Bush* (Ithaca, NY: Cornell University Press, 2014); Hal Brands, *Making the Unipolar Moment: U.S. Foreign Policy and the Rise of the Post-Cold War Order* (Ithaca, NY: Cornell University Press, 2016); Lukas Milevski, *The Evolution of Modern Grand Strategic Thought* (Oxford, UK: Oxford University Press, 2016); and Christopher Hemmer, *American Pendulum: Recurring Debates in U.S. Grand Strategy* (Ithaca, NY: Cornell University Press, 2015).

3. Zbigniew Brzezinski, “From Hope to Audacity: Appraising Obama’s Foreign Policy,” *Foreign Affairs* 89, no. 1 (February 2010): 16–30; Jackson Diehl, “Obama’s Foreign Policy Needs an Update,” *Washington Post*, 22 November 2010; Ryan Lizza, “The Consequentialist,” *New Yorker*, 2 May 2011; Daniel W. Drezner, “Does Obama Have a Grand Strategy?,” *Foreign Affairs* 90, no. 4 (August 2011): 57–68; Peter Beinart, “Obama’s Foreign Policy Doctrine Finally Emerges with ‘Off-Shore Balancing,’” *The Daily Beast*, 28 November 2011; Leslie Gelb, “The Elusive Obama Doctrine,” *The National Interest*, October 2012; Peter D. Feaver, “Not Even One Cheer for Offshore Balancing?,” *Foreign Policy*, 30 April 2013; David Remnick, “Going the Distance,” *The New Yorker*, 27 January 2014; Lee Smith, “As George Kennan Inspired Truman’s Foreign Policy, Now Stephen Walt Inspires Obama’s,” *Tablet*, 5 February 2014; Fred Kaplan, “The Realist,” *Politico Magazine*, April 2014; Gideon Rose, “What Obama Gets Right,” *Foreign Affairs* 94, no. 5 (October 2015): 2–12; Bret Stephens, “What Obama Gets Wrong,” *Foreign Affairs* 94, no. 5 (October 2015): 13–17; Stephen M. Walt, “Don’t Knock Offshore Balancing Until You’ve Tried It,” *Foreign Policy*, 8 December 2016.

4. Peter D. Feaver, “A Grand Strategy Challenge Awaits Trump,” *Foreign Policy*, 29 November 2016; Micah Zenko and Rebecca Friedman Lissner, “Trump Is Going to Regret Not Having a Grand Strategy,” *Foreign Policy*, 13 January 2017; Walter Russell Mead, “The Jacksonian Revolt: American Populism and the Liberal Order,” *Foreign Affairs* 96, no. 2 (April 2017): 2–7; Hal Brands and Peter D. Feaver, “Trump and Terrorism: U.S. Strategy After ISIS,” *Foreign Affairs* 96, no. 2 (April 2017): 28–36; Jennifer Lind, “Asia’s Other Revisionist Power: Why U.S. Grand Strategy Unnerves China,” *Foreign Affairs* 96, no. 2 (April 2017): 74–82; Matthew Kroenig, “The Case for Trump’s Foreign Policy: The Right People, the Right Positions,” *Foreign Affairs* 96, no. 3 (June 2017): 30–35; Elliott Abrams, “Trump the Tradi-

tionalist: A Surprisingly Standard Foreign Policy,” *Foreign Affairs* 96, no. 4 (August 2017): 10–16; Rebecca Friedman Lissner and Micah Zenko, “There Is No Trump Doctrine, and There Will Never Be One,” *Foreign Policy*, 21 July 2017; Simon Reich and Peter Dombrowski, “Has a Trumpian Grand Strategy Finally Stepped Into the Light?,” *War on the Rocks* (blog), 29 January 2018; Keren Yarhi-Milo, “After Credibility: American Foreign Policy in the Trump Era,” *Foreign Affairs* 97, no. 1 (February 2018): 68–77; Barry Posen, “The Rise of Illiberal Hegemony: Trump’s Surprising Grand Strategy,” *Foreign Affairs* 97, no. 2 (April 2018): 20–27; Charles A. Kupchan, “The Clash of Exceptionalisms: A New Fight over an Old Idea,” *Foreign Affairs* 97, no. 2 (April 2018): 139–49; and Daniel J. Arbess, “Is Trump Following a Grand Mideast Strategy?,” *Wall Street Journal*, 5 June 2018.

5. Other modern presidents, for instance George W. Bush, have also been criticized for their grand strategic thinking. For example see John Lewis Gaddis, “Grand Strategy in the Second Term,” *Foreign Affairs* 84, no. 1 (February 2005): 2–15; Joseph S. Nye, “Transformational Leadership and U.S. Grand Strategy,” *Foreign Affairs* 85, no. 4 (August 2006): 139–49; Charles A. Kupchan and Peter L. Trubowitz, “Grand Strategy for a Divided America,” *Foreign Affairs* 86, no. 4 (August 2007): 71–84; John Lewis Gaddis, “A Grand Strategy of Transformation,” *Foreign Policy*, 10 November 2009; and Melvyn P. Leffler, “9/11 in Retrospect: George W. Bush’s Grand Strategy, Reconsidered,” *Foreign Affairs* 90, no. 5 (October 2011): 33–44. Still, the volume and vitriol of grand strategy commentary seems to have increased exponentially during the Obama and Trump administrations.

6. In terms of arguments in favor of a grand strategy of “restraint” or “offshore balancing,” see A. Trevor Thrall and Benjamin H. Friedman, eds. *US Grand Strategy in the 21st Century The Case for Restraint* (New York: Routledge, 2018); Barry Posen, *Restraint: A New Foundation for U.S. Grand Strategy* (Ithaca, NY: Cornell University Press, 2014); John J. Mearsheimer and Stephen M. Walt, “The Case for Offshore Balancing: A Superior U.S. Grand Strategy,” *Foreign Affairs* 95 (August 2016): 70–83; Barry R. Posen, “Pull Back: The Case for a Less Activist Foreign Policy,” *Foreign Affairs* 92, no. 1 (2013): 105–16; Campbell Craig, Benjamin H. Friedman, Brendan Rittenhouse Green, Stephen G. Brooks, G. John Ikenberry, and William C. Wohlforth, “Debating American Engagement: The Future of U.S. Grand Strategy,” *International Security* 38, no. 2 (Fall 2013): 181–99; and Eugene Gholz, Daryl G. Press, and Harvey M. Sapolsky, “Come Home America: The Strategy of Restraint in the Face of Face of Temptation,” *International Security* 21, no. 4 (1997): 5–48. For criticisms of restraint and arguments for “deep engagement” or “liberal hegemony,” see Stephen G. Brooks and William C. Wohlforth, *America Abroad: The United States’ Global Role in the 21st Century* (Oxford, UK: Oxford University Press, 2016); Hal Brands, “Fools Rush Out? The Flawed Logic of Offshore Balancing,” *The Washington Quarterly* 38, no. 2 (2015): 7–28; Stephen G. Brooks, G. John Ikenberry, and William C. Wohlforth, “Don’t Come Home America: The Case against Retrenchment,” *International Security* 37, no. 3 (Winter 2012/13): 7–51; and Stephen G. Brooks, G. John Ikenberry, and William C. Wohlforth, “Lean Forward: In Defense of American Engagement,” *Foreign Affairs* 92, no. 1 (2013): 116–30.

7. Beyond the reviewed works, other scholarship in this camp includes Milevski, *Evolution of Modern Grand Strategic Thought*; David M. Edelstein and Ronald R. Krebs, “Delusions of Grand Strategy: The Problem with Washington’s Planning Obsession,” *Foreign Affairs* 94, no. 6 (December 2015): 109–16; and Jordan Tama, “Does Strategic Planning Matter? The Outcomes of U.S. National Security Reviews,” *Political Science Quarterly* 130, no. 4 (2015/2016): 735–65. For an earlier argument, see Richard K. Betts, “Is Strategy an Illusion?,” *International Security* 25, no. 2 (Fall 2000): 5–50.

Does Grand Strategy Matter?

8. Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca, NY: Cornell University Press, 1984), 7, 13.
9. Brands, *What Good Is Grand Strategy*, 3.
10. Nina Silove, "Beyond the Buzzword: The Three Meanings of 'Grand Strategy,'" *Security Studies* 27, no. 1 (2018): 27–57.
11. For a classic argument regarding concept stretching, see Giovanni Sartori, "Concept Misformation in Comparative Politics," *The American Political Science Review* 64, no. 4 (December 1970): 1033–53.
12. John Lewis Gaddis, *On Grand Strategy* (New York: Penguin Press, 2018), 21.
13. Like Hal Brands' definition cited above, Colin Dueck generalizes Posen's security-centric definition of grand strategy to include "the prioritization of foreign policy goals" writ large, including "the identification of existing and potential resources, and the selection of a plan or road map that uses those resources to meet those goals." Colin Dueck, *Reluctant Crusaders: Power, Culture, and Change in American Grand Strategy* (Princeton, NJ: Princeton University Press, 2006), 1. Similarly, Robert Art thinks a grand strategy "tells a nation's leaders what goals they should aim for" without specifying that these goals must be security related, Robert J. Art, *A Grand Strategy for America* (Ithaca, NY: Cornell University Press, 2004), 1. On how strategic beliefs can adhere to individual leaders, see Elizabeth N. Saunders, *Leaders at War: How Presidents Shape Military Interventions* (Ithaca, NY: Cornell University Press, 2011).
14. Gaddis, *On Grand Strategy*, xii.
15. Charles Hill, *Grand Strategies: Literature, Statecraft, and World Order* (New Haven, CT: Yale University Press, 2010).
16. John Lewis Gaddis, *Strategies of Containment* (Oxford, UK: Oxford University Press, 1982); and John Lewis Gaddis, *George F. Kennan: An American Life* (New York: W. W. Norton & Company, 2011).
17. Ionut Popescu, *Emergent Strategy and Grand Strategy* (Baltimore: Johns Hopkins University Press, 2017), 9.
18. This includes all presidential administrations except John F. Kennedy, Lyndon B. Johnson, Gerald Ford, and Jimmy Carter. Popescu notes that his "selection of cases aimed to examine critical moments of strategic change when an administration, either in a designed or emergent manner, significantly altered the course of US strategy in a positive or negative way. The four presidents not examined here, in my judgment, do not fit this bill." Popescu, *Emergent Strategy*, 21.
19. Popescu, *Emergent Strategy*, 7.
20. Popescu could have benefited from a more structured qualitative research design, such as those described in Sherry Zaks, "Relationships Among Rivals (RAR): A Framework for Analyzing Contending Hypotheses in Process Tracing," *Political Analysis* 25, no. 3 (July 2017): 344–62.
21. For an analysis of the most recent national security and defense strategies, see Kelly A. Grieco, "The 2018 National Defense Strategy: Continuity and Competition," *Strategic Studies Quarterly* 12, no. 2 (Summer 2018): 3–8; and W. Michael Guillot, "2017 National Security Strategy Perspective," *Strategic Studies Quarterly* 12, no. 1 (Spring 2018): 22–24.
22. Simon Reich and Peter Dombrowski, *The End of Grand Strategy: US Maritime Operations in the 21st Century* (Ithaca, NY: Cornell University Press, 2017).
23. For background, see Helene Cooper, "U.S. Disinvites China from Military Exercise Amid Rising Tensions," *New York Times*, 23 May 2018; and Travis Sharp, "The Pragmatist's Case for Keeping China in RIMPAC," *War on the Rocks* (blog), 1 June 2018.

24. Studies of military effectiveness, for instance, often employ this bifurcation, for example, Allan R. Millett, Williamson Murray, and Kenneth H. Watman, "The Effectiveness of Military Organizations," *International Security* 11, no. 1 (Summer 1986): 37–71.
25. Posen, *Restraint*; and Mearsheimer and Walt, "The Case for Offshore Balancing."
26. Reich and Dombrowski, *End of Grand Strategy*, 61–64.
27. Susan Pedersen, *The Guardians* (New York: Oxford University Press, 2015), 232.
28. Pedersen, *Guardians*, 312–4.
29. See the contrast in the arguments about war occurrence and US involvement in Posen, *Restraint*, versus those in Brooks and Wohlforth, *America Abroad*.
30. David A. Lake, "Theory Is Dead, Long Live Theory: The End of the Great Debates and the Rise of Eclecticism in International Relations," *European Journal of International Relations* 19, no. 3 (2013): 567–87.
31. Thomas Oatley, *The Political Economy of American Hegemony: Buildups, Booms, and Busts* (New York: Cambridge University Press, 2015).
32. For a similar argument, see Alexander Kirss, "How Cheap Are Cheap-Riding Allies?," *Charged Affairs*, 10 October 2016.

Book Reviews

The New Russia by Mikhail Gorbachev, trans. Arch Tait. Polity Books, 2016, 400 pp.

To mark the 30th anniversary of the commencement of perestroika, Mikhail Gorbachev wrote *The New Russia* (published in Russian as *После Кремля/Posle Kremlya*, translated *After the Kremlin*), an introspective look at the Russian state based on his own experiences. He examined how Russia has evolved from the Soviet Union to the modern “managed democracy,” controlled by the Putin regime. *New Russia* offers Western readers a viewpoint at once sympathetic to, yet independent of, the liberal democratic narrative which generally informs American thinkers. *New Russia* does not offer particularly fresh insights but does provide Western readers the opportunity to glimpse a divide between the Putin regime and the elements of the Russian population that is often lost from outside Russia’s borders.

Originally published in Russia, *New Russia* adds a Russian perspective to the many English-language books about Russia published in recent years. Arch Tait achieved a quick and masterful translation, allowing Polity Books to issue *New Russia* in 2016, only a year after its publication in Russia. Considering his previous books were all published in both Russian and English, Gorbachev must have designed his work with some English-speaking readers in mind. However, the references he makes to individuals and events demonstrate his first thought was to inspire Russians to take action in their own country. *New Russia* distinguishes itself in this way from those books by Russian authors explicitly seeking to reach Western audiences first.

Gorbachev organized *New Russia* into three parts. The first section chronicled Russian political events of the 1990s, starting from the August Coup in 1991 where Boris Yeltsin drove Gorbachev from power, ultimately leading to the collapse of the Soviet Union in December 1991. Countering claims they were responsible for the collapse, Gorbachev defended his reforms (“perestroika” or “restructuring”) of the Soviet system, which he announced in 1985. He explained the economic and civic growth he hoped to achieve but which was, by his account, stymied by the chaos and corruption ushered in under the first Russian president, Yeltsin. Gorbachev then chronicled his efforts to continue reforms from 1991 to 1999. In the second section, Gorbachev gave his perspective of the Putin era, starting in 2000 until the present, which brought stability at the cost of political freedom and economic development. Finally, the third section looked at global changes since the collapse of the Soviet Union. While he celebrated the spread of democracy, he pointed out instabilities in the global system that may lead to a growing number of crises.

Gorbachev argued for changes he believes must occur within Russia’s political system, and in the relations of other world powers toward Russia, for the Russian people to become true partners with the West in achieving a more democratic, peaceful world. Gorbachev expressed confidence that Russia must experience a true internal reform, both for its own sake and for global stability. Gorbachev described himself as a European-style social democrat who, through perestroika, sought to maintain the benefits of a socialist state while improving the state’s responsiveness to the people’s will. Thirty years later, Gorbachev assessed that his reforms had not been honestly implemented. Gorbachev criticizes the “managed democracy” that followed, under President Vladimir Putin, for mimicking a true civil society, without allowing citizens the freedom to organically develop institutions that may challenge the regime. From Gorbachev’s perspective, such a faux democracy cannot create the social or economic stability Russia needs.

Simultaneously, as a former head of state, Gorbachev is not entirely unsympathetic toward Russia’s leaders. Gorbachev defended his homeland, in many respects demonstrating a conventional worldview aligned with the actions of the current Russian regime. He reproached the West

for the way it treated Russia after the collapse of the Soviet Union, as he saw it dismissing Russian concerns or unhelpfully suggesting fiscal solutions to the Russian state, which worsened its economic crisis. In regards to interactions with the Russia of Putin's era, Gorbachev condemned the return to power politics on both the Russian and Western sides, where military force rather than dialogue characterizes relations between states.

Gorbachev is an authoritative commentator on Russia's political condition, yet his position midway between the Russian regime and political opposition appears to have frustrated both his reforms in the Soviet era and efforts to develop democracy after the collapse of the Soviet Union. His experience and connections give weight to his opinions in *New Russia*, and his insights help explain the Russian perspective of the reconfiguring of the world order during the 1990s, when the US dominated global affairs. However, Gorbachev has not been able to coalesce an organized opposition to either Yeltsin or Putin. He has remained on the periphery of the Russian opposition, providing a coherent ideology of increased economic and social participation but limited in his ability to effect necessary changes. Gorbachev's perspective is generally aligned with the elite opposition and, thus, does not necessarily represent the experience of the bulk of the population.

New Russia suffers from Gorbachev's flaws as a long-lasting politician, though one unable to represent the Russian population. Gorbachev quotes himself extensively, including full transcripts of his interviews, correspondence, and newspaper articles—their length often distracts from the point with their at times rambling, conversational tone. At over 400 pages, the book would have been improved by reducing these citations. However, they demonstrate how he has sought to influence Russian-speaking and Western audiences after he lost formal power as head of the then-main peer competitor to the United States. For these reasons, *The New Russia* is useful for specialists of Eurasian or European affairs but may not be suitable for general readers.

Maj J. Alexander Ippoliti, ANG

Just War Reconsidered: Strategy, Ethics, and Theory by LTG James M. Dubik, USA, Retired. University of Kentucky Press, 2016, 225 pp.

James Dubik's *Just War Reconsidered* uses just war theory as a lens to examine the political and moral responsibility of military officers and policy makers at the strategic and operational level of war. Dubik's central claim is that just war theory is incomplete. Traditional just war theory distinguishes the decision to go to war (*jus ad bellum*), which is the province of policy makers, from how a war is fought (*jus in bello*), which is the responsibility of the military. Dubik introduces a new level of analysis to *jus in bello*: how a war is waged. Fighting justly involves choosing weapons and targets to achieve war aims while minimizing the effect on those not engaged in harm. Waging war justly involves setting war aims, choosing strategies and policies, and prodding bureaucracies to achieve, assess, and readjust those aims and policies as needed, with the knowledge that the lives of those affected by war—soldiers, civilians, and even adversaries—have moral value. While the initial choice of aims and strategies is part of *jus ad bellum*, the dynamic nature of war requires continual reassessment and adjustment as war progresses, properly situating war-waging choices within *jus in bello*. The moral and political responsibility for waging war is shared between policy makers and military officers.

Dubik draws on classical and contemporary just war theory as well as civil-military relations theory to support his argument. In just war theory, he relies principally on Michael Walzer and his war convention, although he also acknowledges the influence of revisionists such as Jeff McMahan and David Rodin. In civil-military relations, he describes Samuel Huntington's model of objective civilian control and Peter Feaver's principal-agent theory but prefers Eliot Cohen's model of "unequal dialogue." His summaries of these works are ideal for those who

may not be familiar with them. They are clear, concise, and do justice to the theories while pointing out how they are deficient, giving rise to the need for this book. Dubik illustrates his points with examples drawn from the Civil War, World War II, Vietnam, both Iraq wars, and Afghanistan, with a strong emphasis on the most recent conflicts.

Dubik identifies five *jus in bello* war-waging principles: continuous dialogue between military and civilian leaders; final decision authority, which rests with civilians; managerial competence in carrying out policies; maintaining legitimacy, which he identifies as a function of both a righteous cause and the probability of success; and resignation as an option for military officers under certain conditions. These principles are a framework, not a checklist. They do not guarantee strategic success, but “senior civilian and military leaders who follow [them] are acting justly with respect to . . . their war-waging responsibilities” (p. 138).

As his principles suggest, Dubik’s argument melds professional ethics and civil-military relations. He faults Huntington’s model for drawing an artificial distinction between politics and war and deferring too much to the military in waging war. Echoing Clausewitz, Dubik identifies a trinity of war-waging concerns that incorporates both political and military elements: achieving coherence by setting aims and choosing strategies and policies likely to achieve those aims; generating organizational capacity to achieve those aims at the least cost in lives and resources, adapting when required; and maintaining legitimacy by fighting justly, engaging public support, and keeping the military subordinate to civilian authority. If Huntington defers too much to the military, in Dubik’s view Feaver defers too little. The civilians’ “right to be wrong,” central to Feaver’s agency theory, does not give sufficient weight to the moral content of decisions that spend the lives of soldiers and on which military officers are likely to have important insight. Cohen’s model of unequal dialogue is described as “necessary but insufficient,” in part because it fails to address the importance of executing and reassessing policy.

Attention or inattention to execution and assessment profoundly influences the duration and likely success of war. This is central to maintaining legitimacy and makes the difference between sustainable sacrifice and spending lives vain. Dubik does not demand perfection in policy formulation, execution, and assessment but argues that “a cycle of sustained imprudence” is immoral as well as unwise. Given the moral stakes, Dubik’s remedy for an officer who cannot meet her *jus in bello* war-waging responsibilities is unsatisfying. The first responsibility of an officer is to make her views known in the privacy of the policy formulation process. If the process consistently fails to assess or acknowledge sustained policy failure so much that continuing current policy is certain to waste lives, Dubik argues, an officer may resign. But, in line with many other scholars, he argues against making the reason for such a resignation public, as to do so would undermine the principle of civilian control. His argument is nuanced: he notes that civilian policy makers who resign under similar circumstances have no obligation to remain quiet and suggests that the disruptive effects of resignation may be enough to force change. Nevertheless, quiet resignation may salvage an officer’s own conscience but offers cold comfort to those doomed by imprudent and immoral policy. That is a high price to pay for the norm of military officers not offering public criticism of civilian policy choices (as distinct from disobedience).

Far from being a criticism, such argument is precisely the type of debate that Dubik hopes to provoke. “Undeniably, what I have presented will be found deficient,” he writes in the book’s final lines. “Equally undeniable, however, is that the content of this book advances the understanding of the moral dimension of war and may stimulate more discussion about an important dimension of just war theory the prevailing view omits” (p. 172). In this, his powerful and provocative book succeeds admirably.

Doyle Hodges

Air University Press has reimagined its journals!



We now literally span the world with the introduction of our new regionally focused publications: *The Air Force Journal of Indo-Pacific Affairs (JIPA)*; *The Air Force Journal of European, Middle Eastern, and African Affairs (JEMEA)*; and the Spanish-, English-, and Portuguese-medium *La Revista Profesional, Fuerza Activa de los EUA, Edición del Continente Americano (JCA, The Air Force Journal of the Americas)*. Get your digital subscription via our website (<https://www.airuniversity.af.edu/AUPress/>) or e-mail us at aupress@us.af.mil.

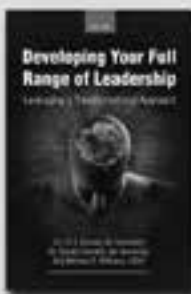


A Discourse on Winning and Losing
[Col John R. Boyd, USAF, Retired; Edited and
Compiled by Dr. Grant T. Hammond / 2018 / 400
pages / ISBN: 9781380566278 / AU Press Code: B-151]



<https://www.airuniversity.af.edu/AUPress/>
<https://www.facebook.com/AirUnivPress/>
<https://twitter.com/aupress/>

Check out our latest book and monograph publications:



*Developing Your Full
Range of Leadership:
Leveraging a Transformational
Approach*
[Dr. FU J. Arenas, Air University,
Dr. Daniel
Connelly, Air University,
Maj Michael D. Williams,
USAF / 2018 / 84 pages /
ISBN: 9781380566274 / AU
Press Code: AU-28]



*"The Stakes Are High:
Ethics Education at US
War Colleges."*
[Lt Col Beth A. Bellin, USA
/ Jan 2018 / 35 pages / AU
Press Code: P-124]

Mission Statement

Strategic Studies Quarterly (SSQ) is the strategic journal of the United States Air Force, fostering intellectual enrichment for national and international security professionals. SSQ provides a forum for critically examining, informing, and debating national and international security matters. Contributions to SSQ will explore strategic issues of current and continuing interest to the US Air Force, the larger defense community, and our international partners.

Disclaimer

The views and opinions expressed or implied in SSQ are those of the authors and should not be construed as carrying the official sanction of the US Air Force, the Department of Defense, Air Education and Training Command, Air University, or other agencies or departments of the US government.

Comments and Contact

Send your comments, suggestions, or address change to:

StrategicStudiesQuarterly@us.af.mil.

Join the debate and like us on Facebook.com/AirUnivPress.

Follow us on Twitter.com/AirUnivPress.

Article Submission

The SSQ considers scholarly articles between 5,000 and 15,000 words from US and international authors. Please send your submission in Microsoft Word format via e-mail to: **StrategicStudiesQuarterly@us.af.mil**

Strategic Studies Quarterly (SSQ)
600 Chennault Circle, Building 1405, Room 143
Maxwell AFB, AL 36112-6026
Tel (334) 953-7311

Strategic Studies Quarterly online: <https://www.airuniversity.af.edu/ssq/>

Free Electronic Subscription

Strategic Studies Quarterly (SSQ) (ISSN 1936-1815) is published quarterly by Air University Press, Maxwell AFB, AL. Articles in SSQ may be reproduced free of charge. Notify editor and include a standard source credit line on each reprint.

A forum for critically examining,
informing, and debating national and
international security



"AIM HIGH... FLY-FIGHT-WIN"



<http://www.airuniversity.af.edu/SSQ/>

