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Why De-escalation Is Bad Policy

The United States has often shown restraint and sought de-escalation when provoked by adversarial regimes. For example, in 1968 North Korean naval forces attacked and captured the USS *Pueblo* in international waters. In 2001 a People's Liberation Army Air Force aircraft harassed and ultimately collided with a US Navy P-3 aircraft operating in international airspace, forcing it to land on Hainan Island. More recently, on 7 June 2019, the United States did not escalate when a Russian destroyer approached within 100 feet of a US Navy ship and the two almost collided. The latest event involved Iran downing a $130 million drone reportedly in international airspace. Given these incidents and many others, one has to wonder if de-escalation has come to hurt the nation and whether our de-escalatory tendencies have made even greater provocations inevitable.

Today, de-escalation seems to be the goal of US policy and the default position to such an extent that many policy makers, lawmakers, and pundits are self-deterred by the thought of military escalation. This kind of thinking is counterproductive for three reasons. It creates doubt about US credibility, undercuts assurance of allies, and precipitates adversarial actions against our forces and interests. The United States should instead embrace escalation as a policy of prevention, particularly for low-level provocations, and at the same time say what it means and mean what it says.

When leaders profess their desire to perpetually de-escalate provocations and crises, the message received by our adversaries is that the United States lacks credibility and fears confrontation. During the Korean and Vietnam Wars, the United States appeared too concerned about or fearful of escalation rather than showing conviction to solve a conflict on terms aligned with democratic interests and values. Recently, in response to Iran's provocation, a senior US lawmaker stated that we must "do everything in our power to de-escalate." The same sentiment was evident in former secretary of state John Kerry's response to Russian actions in Syria. This fear of escalation is also seen in interactions between US Navy ships in the South China Sea and the so-called China maritime fleet, which signals weakness in "respect based" cultures. Another example is the US reaction to the situation in Ukraine. While this scenario continues to unfold, our initial response was to limit assistance to nonlethal aid for fear of escalation. In each of these examples, and many others, adversaries have learned to prey on US de-escalatory tendencies and rely on our timid reactions.

The result is a slow, insidious decline in perceived US credibility and resolve when it is confronted with clear violations of international law and threats of direct aggression. Some scholars argue that states should avoid confrontations that attempt to preserve their credibility while others argue in favor of it, particularly during noncrises. A policy of escalation helps preserve credibility to avoid fighting wars. But US credibility is not the only casualty of de-escalation as policy; it also affects US alliances.

A policy of de-escalation sends a negative message to our allies about US assurances—even more so than some current political messages. Such assurances are critical to the American alliance system, and research suggests that reliable nations make better alliance partners. We have seen examples of negative assurances in the past, particularly whether the United States would live up to its nuclear commitments during the Cold War. Would we trade New York for Berlin? Without assurances from the United States, the system itself may well fracture, allowing for more of the types of aggression ongoing in the Indo-Pacific and Eastern Europe. To be sure, there remains a risk of entanglement in a crisis created by allies, but being willing to escalate seems more likely to help prevent its occurrence.

Without a willingness to escalate, alliances become meaningless commitments and the world becomes a more dangerous place. In a recent *Foreign Policy* article, Elbridge Colby writes about the key to Chinese and Russian success in a great power conflict. His prescription: restraint by Washington. De-escalation is the culprit in what Colby describes as the "fait accompli." Particularly in the Baltic States, de-escalation messages create doubt among our allies as to whether the United States considers escalation worth the risk, or cost. The same could be said for Chinese actions to forcefully reclaim Taiwan or control the sea-lanes of the Indo-Pacific.

Without question, the greatest problem with a policy of de-escalation is the impression it sends to our adversaries. Over the past few years, US policy makers have instinctively looked to de-escalate crises at all costs— from China to Syria to Iran. The result has been Russian aggression in Syria, Georgia, and Ukraine; Chinese island fortifications that threaten freedom of navigation; Iranian attacks in the Middle East; and North Korean threats in Southeast Asia. Thus, the very word *escalation* seems to have created fear among some US decision makers and scholars.

At the same time, Moscow has learned the value of escalation to a strategy of victory by incorporating it into its doctrine. Putin openly embraced escalation in 2014 during the invasion of Ukraine by warning against any outside intervention. This approach contrasts markedly with that of the United States. Likewise, China seems to have also learned the

lesson of escalation. Over the past 10 years, China has increased tensions with most of its neighbors over South Pacific territory.

It has violated international law by claiming sovereignty over and establishing military installations on reefs in international waters. These and other escalation disputes have gone relatively unanswered by the United States. Our de-escalation policy has precipitated many of these aggressive, unlawful actions by our adversaries. The more we rely on de-escalation as the default policy, the more our credibility is diminished, our assurances are weakened, and our adversaries are emboldened.

So what is a reasonable alternative? Thomas Schelling's ideas on deterrence are in a sense tangential to the argument, but they offer a useful insight. Schelling describes why deterrence works by using the analogy of driving down the center of a roadway, approaching your adversary from the opposite direction, and throwing the steering wheel out the window. In his words, this scenario creates a threat that leaves something to chance.

De-escalation leaves nothing to chance. It signals to the adversary that the goal in any provocation or crisis is nonconfrontation. This is the wrong signal. Our goal should be prevention and resolution on favorable terms—something a willingness to escalate may offer. The United States could enhance its credibility by eschewing de-escalation. It should not be the default position at the outset of adversarial challenges as seems to be the case today. Our declaratory policy should embrace escalation to the extent necessary to prevent crises, protect American interests, and support international law.

"Peace through strength" is a well-known mantra for maintaining US military power. But, to paraphrase former secretary of state Madeleine Albright, what good is a superb military if you don't use it? The United States must be willing to use its wonderful military along with other instruments of power to escalate crises if necessary. Doing so would require clearly stating our intentions to respond to military aggression with greater military aggression, to harassment with lethal force, and to military challenges with military defeat—no matter the domain. Aggression and harassment become the "red lines" and our escalatory response leaves something to chance. Declaring our intent to stand firm, with resolve and assurance, would unquestionably help prevent the lesser forms of insidious aggression and most certainly help deter the more explicit, dangerous provocations that could lead to war.

Just as de-escalation should not be the default position, neither should automatic escalation. The danger may well be an ally unjustly drawing the United States into a conflict or a scenario where US escalation would

unwittingly draw in a treaty ally. Such seems to be the case between the United States and South Korea with respect to North Korean aggression. Escalation would certainly be appropriate to support a treaty ally suffering from explicit aggression. It would also be appropriate as an immediate self-defense measure. Furthermore, it seems that escalation can be most useful as a long-term preventive action if used mostly against lower-level provocations. Such instances might include aggressive actions against US forces or US flagged assets operating within the confines of established international law.

Of course, any attempt to escalate a crisis or challenge scenario comes with risks of spiraling conflict and second-order effects including greater violence and carnage. However, in many cases, the risks stem from a lack of any response and increase thereafter. The greater risk is in allowing our adversaries to believe their unlawful provocations will succeed. Thus, escalation is sometimes the best prevention. The theory here is to use a policy of escalation to prevent lower-level provocations from expanding to larger issues with greater stakes. Adversaries should believe that their provocations will not be tolerated and their aggression will have serious implications.

To be fair, de-escalation might be appropriate in certain crises where the United States is challenged as a third party in a situation where it had no interest at stake. This scenario could arise in a dispute between two non-US allies or nonformal treaty states. Another case might be if escalation would adversely affect an immediate US response to save lives, prevent suffering, or mitigate great property damage. Then, the United States should not allow its position to drive out its interest.

Some believe that a de-escalation policy is the safest form of response to crises, and critics will surely decry the argument for escalation as the more dangerous option. However, the evidence from past decades indicates that such beliefs appear to be simply acquiescence to aggression rather than reliable prevention. Thus, a goal of de-escalation in one crisis begets the next. The key to long-term strategic stability is having the wisdom to decide when to escalate and when not to. Our adversaries should know and appreciate that the United States intends to say what it means and escalate as necessary to mean what it says. We should not make idle threats—we must make promises. Those who ruffle the eagle's feathers should expect to be squeezed by the talons and ripped by the beak. **SSQ**

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Realism, Idealism, Deterrence, and Disarmament

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Abstract

The general concepts of idealism and realism appear to have captured truths about what should be and what is, respectively. The idealist's contemporary focus on the humanitarian consequences of nuclear war surely is valid: the risks to humanity of the employment of nuclear weapons are simply so extreme in so many scenarios that nuclear war must be prevented. However, the contention that nuclear disarmament is the answer—and correspondingly nuclear deterrence must be demoted—presumes that the cooperative transformation of the interstate system necessary for disarmament is likely within a meaningful timeframe. Yet degrading nuclear deterrence now in favor of transformation and disarmament risks "waiting for Godot" because also valid is the realist's basic contention that the timely transformation of the interstate system needed for cooperative global nuclear disarmament appears implausible in the extreme. The apparent tranquility of the immediate post–Cold War period that led many to optimism in this regard no longer exists, and the premature demotion of nuclear deterrence could unintentionally precipitate its failure.

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In 1962 renowned realist academic Hans Morgenthau observed that "the history of modern political thought is the story of a contest between two schools that differ fundamentally in their conceptions of the nature of man, society, and politics."[1] Arnold Wolfers, another highly regarded twentieth-century political theorist noted similarly, "In international relations, two opposing schools of thought have fought each other throughout the modern age. Ever since Machiavelli published *The Prince*, his 'realistic' views have shocked 'idealist' thinkers. . . . Today, more than ever Ameri-

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can statesmen and the American public find themselves torn between the conflicting pulls of idealist and realist thought."[2] Decades later, at the beginning of the new millennium, the same point held true. The study of international relations "can be reduced to two broad, internally rich and competing conceptions of the subject: idealism and realism."[3] The two concepts "are fundamentally at odds with one another, and cannot be reconciled in theory or practice. . . . The clash between idealists and realists is an ontological foundation predicated on conflicting assessments of human nature and the possibilities for, and appropriate conceptions of, progress in international relations."[4] This conceptual debate extends to nuclear weapons, deterrence, and disarmament.

A well-developed nuclear disarmament narrative contends that disarmament is a matter of existential importance because individual state deployment of nuclear arsenals poses an extreme and immediate risk to humanity: "All nuclear weapons are a humanitarian threat . . . designed to lay waste to cities and indiscriminately mass murder civilians."[5] Consequently, this narrative concludes with the corresponding policy prescription that the pursuit of complete nuclear disarmament should be the US policy priority and, indeed, the priority goal of all states in the international system.[6]

This disarmament narrative acknowledges the reality that international threats can drive national leaders' felt need for nuclear weapons to help address their respective security concerns. However, this reality does not justify the continued pursuit or maintenance of national nuclear capabilities: "They do not diminish the necessity of disarmament. Acknowledgement of fundamental security realities makes nuclear disarmament more, not less, urgent."[7]

The disarmament narrative's contention is that the continued existence of nuclear weapons now poses a greater security risk to states than would their voluntary nuclear disarmament. Indeed, the risk posed by the existence of nuclear arsenals is unprecedented and should establish the dynamic for the equally unprecedented level of interstate cooperation necessary for nuclear disarmament: the need to address the nuclear risk should overshadow other national security fears and drive the level of interstate cooperation needed for disarmament.

Idealists see the inherent dangers of an anarchic international system. They focus on the priority goal of transforming the system to achieve a cooperative order that reliably facilitates the peaceful resolution of interstate conflicts. Idealists deem this transformation goal to be feasible if national leaders will follow reason and enlightened self-interest. For idealists, all reasonable parties should share this goal. Their belief is that such trans-

formation would ease or eliminate the harsh security concerns otherwise imposed on states by the anarchic structure of the existing international system. Further, it would alleviate the corresponding need for states to prioritize power and position over more noble and cooperative callings.

In contrast, for many realists, interstate conflicts of interest and the potential for aggression are constants inherent in an anarchic, "self-help" international system: "With each state judging its grievances and ambitions according to the dictates of its own reason or desire—conflict, sometimes leading to war, is bound to occur."[8] Interstate cooperation cannot be assumed, and no authority exists with the power and will to reliably enforce norms or prevent aggression. Consequently, while there are points of cooperation among states, individual states ultimately are responsible for their own survival because no other reliable mechanism is in place to protect them. Thus, the pursuit of national power for self-preservation is a reasonable and prudent national priority.

Whereas realists see states as compelled to pursue power and position given the unavoidable potential for conflict and aggression in an anarchic international system, idealists see the potential for its profound transformation to a more cooperative and peaceful order. The latter would allow states to reduce or even eliminate the pursuit of national power and position as the priority. Realism and idealism provide contrary starting points about the nature of international politics that lead to equally contrary analyses and conclusions about national leadership best practices. Indeed, the eminent scholars and statesmen of each philosophy often see precisely the same set of international circumstances yet draw wholly contradictory conclusions about their meaning and the most reasonable courses of action.

That these two competing schools of thought differ is nowhere more apparent than in debates about nuclear weapons, particularly nuclear disarmament. But the significance of idealism and realism to the nuclear debate is rarely part of the discussion.[9] This general lack of recognition or acknowledgement of the idealist or realist connection to competing nuclear narratives obscures an understanding of the assumptions, logic, strengths, and weaknesses of those narratives. Competing narratives about nuclear deterrence and disarmament that ignore their idealist or realist roots will miss much of the story and likely lead to conclusions that are significantly uninformed. The goal here is not to review all the academic variations and nuances of idealism and realism. Rather it is to identify the connections of competing nuclear narratives to general idealist and realist thought and, by doing so, help provide a deeper understanding of those narratives and a more complete framework for considering them.

Idealist Thought and Nuclear Disarmament

Idealism often is the explicit or implicit philosophical position underlying the nuclear disarmament narrative. It essentially contends that the prevailing international system of independent and often conflicting states can be transformed via concerted, cooperative international efforts to such a degree that individual states ultimately will no longer feel compelled to, or need to, maintain independent nuclear arsenals. The felt need to maintain nuclear weapons can be relieved by developing alternative global security mechanisms and antinuclear norms that advance and codify the common desire to eliminate nuclear weapons and the risks they pose to all humanity. Given this threat, it is in each state's enlightened self-interest to take these actions cooperatively.

This disarmament narrative—in common with idealist thought in general—places considerable emphasis on the transformative power of reason, enlightened self-interest and the instruments of collective or "cooperative" security, international institutions, laws, and norms. These are the mechanisms that have the potential to transform the international system.[10] The rudiments of these mechanisms and corresponding transition purportedly are already visible in the rise of international institutions, the decline of interstate wars and combat deaths over decades, the workings of the United Nations, the enactment of multilateral arms control agreements, and the spread of democratic governments.[11]

The expressed need for such a transformation and belief in its practical feasibility are reflected in President Obama's well-crafted and idealist-oriented 2016 speech to the United Nations. He offers the promise that leaders of good will can transform the international system.

> We are all stakeholders in this international system, and it calls upon us to invest in the success of [international] institutions to which we belong. . . .
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> . . . . I recognize history tells a different story than the one that I've talked about here today. There is a darker and more cynical view of history that we can adopt. . . .
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> . . . . We have to remember that the choices of individual human beings led to repeated world war. But we also have to remember that the choices of individual human beings created a United Nations, so that a war like that would never happen again. Each of us as leaders, each nation can choose to reject those who appeal to our worst impulses and embrace those who appeal to our best. For we have shown that we can choose a better history.[12]

Idealists have pointed to different modes and paths for this transformation but typically suggest that the dynamic for its realization will be a common, reasoned response to the obvious need to establish a more peaceful and secure order. As a highly regarded mid-twentieth-century historian, E. H. Carr describes this dynamic: "Reason could demonstrate the absurdity of the international anarchy; and with increasing knowledge, enough people would be rationally convinced of its absurdity to put an end to it."[13] Carr notes that the idealist drive to do so flourished in Western countries following the horrific slaughter of World War I. In particular, after that war, President Woodrow Wilson advanced the goal, logic, and arguments of idealism in his great efforts to establish the League of Nations—an international organization he intended to provide collective security for all states via the power of world public opinion, economic sanctions, and military force if necessary.[14]

The relationship between the prospects for disarmament and a cooperative international political order has long been recognized. A highly regarded 1941 academic study of international arms control efforts following World War I reaches this conclusion:[15]

> Any diminution in the relative armament strength of a state means a proportionately diminished ability to carry its national policies through to what it regards as a successful conclusion. Conference delegates are determined to maintain and are disposed to increase, their nation's armament power relative to that of other states; hence they scrutinize every scheme of reduction with minute care, and uncharitably search for the special motive prompting it proposal. Pervaded by this atmosphere of mutual distrust, disarmament gatherings are led to discuss the means of waging war under the name of peace.
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> . . . Evidently the [necessary] conditions of peace include not only the stable balance of power . . . but also a system of international law intolerant of violence, a desire for peace in the human population superior to all conflicting desires, and an organization of the world community adequate to restrain hostilities.
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> . . . The present epoch may be a period of transition in world history—transition from the exclusive pursuit of national interest, with war as an accepted instrument of national policy, to the cooperative establishment of the conditions of peace. But the latter goal is not yet in sight; it remains a period of transition.[16]

The well-known 1960 text by Grenville Clark and Louis Sohn, *World Peace through World Law*, lays out in great detail the legal framework and

requirements for an international organization with the authority and police power needed to enforce the general disarmament of all states and peaceful interstate relations—effectively transforming the international system by eliminating the national security concerns so central to realist thought.[17] Their work presents the underlying principles and main features of such a transformed global collective security organization, with the hopeful prediction that by 1975 it would be "well on its way."[18]

In 1983 the US Conference of Catholic Bishops issued a pastoral letter on nuclear weapons and deterrence. It concludes with a conditional endorsement of nuclear deterrence as a step en route to disarmament in a transformed international system: "There is a substitute for war. There is negotiation under the supervision of a global body realistically fashioned to do its job. It must be given the equipment to keep constant surveillance on the entire earth. Present technology makes this possible. . . . It must be empowered by all the nations to enforce its commands on every nation."[19]

The contemporary disarmament narrative contends that the catalyst for a transformation is recognizing the potential for a global nuclear catastrophe. When leaders understand the severity of the common threat posed by the existence of nuclear weapons, they should be willing to engage in nuclear disarmament in their own enlightened self-interest. That is, the common threat posed by the existence of nuclear weapons can overcome national leaders' felt need to sustain them for national security purposes and inspire the unprecedented interstate cooperation needed to transform the system and realize nuclear disarmament:

> To reach nuclear zero it is necessary to achieve what Professor Jonathan Schell describes as political zero, a state of political relations among nations in which there is no desire or need to possess nuclear weapons, where tensions and animosities that lead nations to fear their neighbors have declined towards zero. Political zero does not mean that nations live in a world without conflicts; it only means the risks of conflict can be limited in a system where certain mechanisms exist to prevent them from escalating to dangerous levels.[20]

Thus, the emphasis is on the transformation of the international system as necessary to enable global nuclear disarmament, and the fear of a global nuclear catastrophe is the catalyst that should drive that transformation. Because of the unprecedented severity of the common nuclear threat to all countries, the transformation of the international system needed for nuclear disarmament should be feasible with informed leaders behaving reasonably and with courage. Proponents of disarmament emphasize that

the national security fears driving the desire for nuclear capabilities may be overcome to enable nuclear disarmament via "strategic foresight and political courage":[21] "It is ideas . . . rather than technical problems, that present the most difficult barriers to reaching [nuclear] zero. These are problems that can be overcome. No law of nature stands in the way."[22]

This disarmament narrative recognizes that the cooperative international transformation needed has not occurred in history and would need to proceed incrementally. It further contends that given the common and unprecedented threat to all humanity posed by nuclear weapons, moving in this direction can proceed with broader recognition of that nuclear threat and the enlightened world leadership needed to implement the transformation.[23] This transformation can not only reduce or eliminate the felt security requirement of individual states for nuclear weapons and deterrence but also enable the common good of eliminating the risks these weapons pose to all states and peoples.

The initial process of disarming, driven by the global fear of nuclear weapons, can be a dynamic for the further cooperative transformation of the international system.[24] As a noted journalist has suggested, "Maybe this is how a new sort of world, with foundations planted in human solidarity and connectedness, will come into being. Maybe this is the true value of nuclear weapons: scare us into learning how to get along."[25]

Correspondingly, frequently expressed goals of the nuclear disarmament narrative include (1) globally promoting recognition of the inherent risks to all posed by nuclear weapons, and the consequent need for transforming international relations to enable their elimination; and (2) organizing political pressure on national leaders to move in this direction. There are many examples of this argument in action, including the relatively recent US official and popular advocacy of "nuclear zero"[26] and the contemporary UN-based Treaty on the Prohibition of Nuclear Weapons:[27] "International norms influence all states. . . . There must be a global embrace of the U.N.'s Treaty on the Prohibition of Nuclear Weapons, which sets these norms against nuclear weapons."[28]

President Obama endorsed the modern nuclear zero movement very publicly, with realist caveats, in his famous 2009 Prague speech.[29] Unsurprisingly, this nuclear disarmament initiative subsequently received an unparalleled level of favorable public and media attention. As Yale professor Paul Bracken observes, "Academics, think tanks and intellectuals quickly jumped on the bandwagon. For a time, it really looked like there was going to be an antinuclear turn in U.S. strategy."[30]

Also in 2009, then-director of the International Atomic Energy Agency, Mohamed El Baradei, pointed to the need for an effective global collective security system to enable nuclear disarmament: "We need a return to a system rooted in effective multilateralism. The [United Nations] Security Council must be drastically reformed so the world can rely on it as the primary body for maintaining international peace and security, as foreseen in the UN Charter."[31] El Baradei's point here nicely reflects the fundamentals of idealist thought as applied to the question of nuclear disarmament: when a global organization (in this case, the UN) is able to maintain "international peace and security" reliably, states in the system will no longer confront dominating security concerns and will, therefore, be free to disarm without fear.

Well before 2009, however, scholars of international relations suggested the viability of an idealist-oriented path for transforming the international system to achieve the goal of nuclear disarmament. For example,

> if the roots of the nuclear problem lie in a pathological national-state system, then we need to do no more (and should do no less) than change that system. Some of the necessary changes have been recognized for a century or more. Foremost among them is strengthening international authority so that it can provide an effective system of security for all nations. . . . If citizens' movements can force nations to follow through on creating an effective international security organization, they can pull the deadly fangs of the nation-state system.[32]

The nuclear disarmament narrative often refers to national policies of nuclear deterrence as impeding progress toward nuclear disarmament and an unworthy, shortsighted rationale for sustaining nuclear weapons. A policy of nuclear deterrence is deemed an impediment because it suggests a positive, important value for nuclear weapons in contrast to the establishment of a global norm against them. Consequently, the argument for nuclear disarmament often includes a critique of nuclear deterrence (the primary justification for nuclear weapons) as being an unnecessary, unreliable, and accident-prone security strategy. The point is, were national leaders to set aside nuclear deterrence policies, there ostensibly would be little or no loss of national security because nuclear deterrence is unnecessary and/or unreliable. In return, countries would benefit from eliminating the risk of nuclear accidents and an easing of the way to global nuclear disarmament. This trade-off is the great net benefit of pursuing disarmament, and not deterrence, as the priority.

In short, advocates of nuclear disarmament often become critics of nuclear deterrence and present the prioritization of nuclear deterrence or nuclear disarmament policies as mutually exclusive choices, with the obvious conclusion that disarmament is the only sensible choice: "Nuclear deterrence comes with tremendous risks and costs. The arguments in favor of deterrence, if sometimes true, are not likely to be true in every case. What happens when it fails? . . . The growing risk of a catastrophic nuclear war outweighs the uncertain benefits of deterrence for the United States."[33] Further, "nuclear deterrence is the heart of the nuclear believers' case; it's their indispensable idea, and without it, they have nothing. Nuclear deterrence is indefensible because 1) we don't understand it, 2) it has failed in the past, and 3) it will inevitably fail in the future."[34] Nuclear deterrence policies and weapons are a problem; the transformation of the international system and disarmament are the answer.

Realist Thought and Cooperative Global Transformation

Realist thought, while quite varied, is based on the proposition that the international system is an anarchic, "self-help" system because cooperation cannot be assumed and there is no overarching authority with sufficient power to regulate interstate behavior reliably and predictably.[35] Most importantly, no global organization exists that is capable of reliably preventing interstate aggression. Because conflicts of interest among states are inevitable, the absence of an overarching organization with authority and power leaves open the constant opportunity for aggression and war by any state so inclined. As Robert Jervis has noted, "For realists, world politics is a continuing if not an unrelenting struggle for survival, advantage, and often dominance."[36] This is not to suggest that realism contends that there are no international institutions, laws, norms, or possible points of trust and cooperation. That these exist is self-evident. However, in an anarchic international system, as states encounter conflicts of interest, each state ultimately has the prerogative to decide its own course of action for good or ill; there is no international authority with sufficient unity of will and power to reliably enforce international laws and norms.

Individual states are also ultimately on their own for their protection from external threats. States seek power to provide for their own security but in doing so may drive the suspicions and fears of others concerned about their own relative power positions.[37] States seeking no more than their own security can drive other states' perceptions of insecurity as each must be watchful of the other in a lawless system. Because the international system is anarchic and dangerous in this sense, each state must be

concerned about its power position relative to any other state that is, or might become, a security threat. As noted by the renowned realist scholar Kenneth Waltz, "States coexist in a condition of anarchy. Self-help is the principle of action in an anarchic order, and the most important way in which states must help themselves is by providing for their own security."[38]

Consequently, according to this realist axiom, in response to the condition of international anarchy each state has an overarching interest in its power position (defined as the capability to control others). Hans Morgenthau refers to this as "interest defined as power."[39] In the international sphere, state leaders generally will, to the extent feasible, seek power in response to the threat levels they perceive or anticipate. Leaders generally also will subordinate, if necessary, other possible goals, such as adherence to international norms or legal standards, to the accumulation and use of power necessary to provide for national survival.

Realists generally contend that this is not an immoral, ignorant, or malicious approach to international relations. Rather, it is a reasonable and prudent response to the reality of an anarchic international system and the security concerns it imposes on virtually all states. Morgenthau explains in this regard that the standards by which national political leaders must judge their international behavior are different from those of the lawyer, moralist, or religious leader.[40] Political leaders must place national survival and the necessary tools of power for that survival as their priority goals, subordinating if necessary other possible national goals to this end—including adherence to international norms or legal codes. As famed Oxford history professor Sir Michael Howard remarked, "Those responsible for the conduct of state affairs see their first duty as being to ensure that their state survives; that it retains its power to protect its members and provide for them the conditions of a good life. For the individual, personal survival is not necessarily the highest duty. He may well feel called upon to sacrifice himself to his ideals, his family, or his friends. The state, or those responsible for it, cannot."[41]

In short, national leaders do not have the prerogative to subordinate the goal of protecting those under their authority against foreign threats to other goals if doing so would threaten national survival. To do so would be to abdicate their most basic leadership responsibilities of protecting national survival in a dangerous international system. In contrast, the lawyer may see adherence to legal codes as the highest-priority goal, the moralist adherence to moral standards, and the religious leader adherence to religious standards.

The realist challenge confronting the idealist nuclear disarmament narrative is the contention that the cooperative transformation of the anarchic international system to one that is reliably cooperative and enables nuclear disarmament is implausible, if not impossible, in any anticipated timeframe. And, in the absence of such a transformation, some states will continue to ease their security concerns via the maintenance of nuclear capabilities for deterrence and/or coercive purposes. Initiatives that place policy priority on the US pursuit of nuclear disarmament over sustaining nuclear deterrence capabilities may be misguided and possibly dangerous because the underlying international transformation necessary for general nuclear disarmament simply is not plausible.

The central importance to the nuclear debate of these basic philosophical positions about what is and is not plausible is reflected in the 2009 final report of the bipartisan strategic nuclear posture commission (Perry-Schlesinger Commission). It states that "the conditions that might make possible the global elimination of nuclear weapons are not present today and their creation would require a fundamental transformation of the world political order."[42] Such a declaration is directly from the realist canon: only when international relations are transformed so that member states no longer confront security threats and no longer believe themselves "on their own" will they reasonably eliminate the capabilities they consider essential to their security. Nuclear disarmament could ultimately be a consequence of such a transformation, but disarmament cannot precede that transformation. Indeed, calling on states to disarm without the prior cooperative transformation of the anarchic interstate system is asking them to take imprudent risks with their own survival. States confronting existing or prospective security threats, particularly including nuclear threats, cannot reasonably be expected to accept such risks. Why? University of Chicago professor John Mearsheimer offers the realist's answer in stating, "Nuclear weapons are considered the ultimate deterrent for good reason: Adversaries are unlikely to threaten the existence of a nuclear-armed state."[43] For the realist, nuclear weapons are a symptom of the enduring realities of the international system: conflicting interests, a continuing security dilemma, and the enduring possibility of interstate war. If these can be ameliorated or eliminated reliably via systemic change, then eliminating nuclear weapons could be an easy, even natural consequence. If not, then at least some states will continue to seek nuclear weapons, and as a consequence, others will see a need to do so as well.

Realist thought does not contend that states should or will reject all forms of arms control—there may be occasion for agreement that is in

each party's national interest. However, in general, in an anarchic, self-help system, states will not willingly part with those capabilities they consider essential to their security: "Simply stated, the world has yet to ban successfully any weapon deemed to be effective by those with the desire and the means to acquire it."[44] States will not willingly forego the capabilities they believe essential to their security on the hope or promise that cooperation will prevail and the threats they face will cease, or that their security needs will otherwise somehow be met. The prudent expectation must be that in a system that effectively remains lawless, a state's survival could ultimately depend on its own power. Such an expectation reasonably precludes a general willingness to forfeit necessary power in advance of the establishment of a reliable, enduring alternative security mechanism that eliminates national security concerns (i.e., a new international political order).[45] Consequently, many realists see arms control agreements as most feasible when they are least meaningful.

Reflecting this realist logic, in 1929 President Herbert Hoover observed, "Until such time as nations can build the agencies of pacific settlement on stronger foundations; until fear, the most dangerous of all national emotions, has been proved groundless by long proof of international honesty; until the power of world public opinion as a restraint of aggression has had many years of test, there will not have been established that confidence which warrants the abandonment of preparedness for defense among nations. To do so may invite war."[46]

Critiquing the Narrative

Waltz's early realist critique of the idealist disarmament narrative reveals the divide separating realism and idealism and its effect on views regarding nuclear disarmament. Waltz observes that there have been many past claims that a common fear stemming from the dangers of a new military technology—from lighter-than-air balloons to dynamite—would drive leaders to unprecedented cooperative action, effectively leaving the past behind. History demonstrates, however, that reality has dashed all such expectations.

The claim regarding the transformative effect of nuclear weapons, Waltz contends, will prove no more powerful a dynamic in this regard. It is not because Russian, Chinese, or American leaders are foolish or ignorant or because some national or international villain now precluding disarmament must be corralled so disarmament can proceed. He argues that it is because national leaders predictably will continue to perceive and respond differently to the lethality of nuclear weapons. It may inspire the "peace

wish" of some but not others: "One can equate fear with world peace only if the peace wish exists in all states and is uniformly expressed in their policies."[47] Different responses may be deemed reasonable and defensive national behavior in an anarchic system—depending on the external threat each state confronts or anticipates.

A tenet of much realist thought emphasizes that the cooperative transformation of the international system to a benign order is hardly plausible because the system lacks the mutual trust necessary for its own transformation. To establish a much more cooperative system or a benevolent central authority with power would require a level of interstate trust that neither exists now nor can exist prior to the establishment of a rule-based cooperative order that is reliably enforced. This system, as described by Prof. Marion Boggs in 1941, is one of "international law intolerant of violence . . . and an organization of the world community adequate to restrain hostilities."[48]

The realist paradox confronting the idealist nuclear disarmament agenda is that international trust must already exist to enable the establishment of the central authority or cooperative system that could, in principle, mandate and enforce disarmament. Why so? Because in the absence of a high level of international trust, national leaders should not be expected to accept the risk of ceding their critical tools of power to a weak central authority such as today's United Nations. If they were to disarm prior to that central authority reliably providing collective security, what then would provide for their protection if opponents did not simultaneously relinquish their tools of power? And what authority and power would enforce their opponents' disarmament? The realist asks, "Where would such a guarantee come from, and why would it be credible?"[49] States cannot prudently disarm simply trusting that others will cooperatively do likewise or that a central authority will one day emerge capable of protecting them and enforcing norms. If that level of cooperation and interstate trust existed reliably in the international system, there would be no need for a central authority to provide order and enforce rules—cooperation would be the norm and could be presumed.

The lack of international trust, however, is the condition that many realists suggest permits "no exit" from the anarchic system. The ever-present prospect of aggression by untrustworthy states creates an inherent security concern for others, and the corresponding absence of international trust prevents the consensual creation of a central authority or cooperative order that transforms the system. Its creation would require all members to cooperate reliably and/or to transfer their power to the central authority near-

simultaneously, trusting that possible adversaries would also do so. Yet in the absence of an existing, overarching authority that itself is trustworthy and capable of enforcing good behavior, there can be no basis for expecting that all states would cooperate reliably, transfer power to a central authority, or establish a powerful decentralized cooperative interstate regime.

In sum, many realists see a classic "chicken and egg" problem. The absence of adequate trust and cooperation in the international system drives the need for the transition to a benign central authority or other cooperative order as envisaged by idealists, but it also undermines the prospect for such a transition. Before prudent leaders will be willing to disarm, an alternative mechanism would first need to provide national security. Disarmament cannot be such a mechanism absent transformative mutual trust that does not exist in interstate relations and, by any empirical assessment, does not appear to be in sight.

Consequently, realists often conclude that it is a mistake to present nuclear disarmament as the enlightened alternative to nuclear deterrence and the risk of its failure. It is a non sequitur to assert that because nuclear war must be prevented, nuclear disarmament is the answer, and thus nuclear deterrence should be devalued. This logic presents a false choice because whatever the weaknesses of nuclear deterrence, nuclear disarmament is not a plausible alternative. It essentially is precluded in any meaningful timeframe by the character of the international system and its lack of transformative interstate trust.

In addition, while there is no realist consensus on the level of confidence that may properly be attributed to deterrence strategies, realists generally see value in nuclear deterrence to prevent war and its escalation from historical evidence. This conclusion regarding nuclear deterrence has been reached by a diverse set of academics, historians, and participant-observers. For example, based on extensive and careful research, Richard Lebow and Janice Stein conclude that nuclear deterrence moderated superpower behavior during the Cold War. They state that "once leaders in Moscow and Washington recognized and acknowledged to the other that a nuclear war between them would almost certainly lead to their mutual destruction[,] . . . fear of the consequences of nuclear war not only made it exceedingly improbable that either superpower would deliberately seek a military confrontation with the other[,] it made their leaders extremely reluctant to take any action that they considered would seriously raise the risk of war."[50] John Lewis Gaddis, the renowned Cold War historian and Yale University professor, similarly concludes that nuclear deterrence indeed contributed to the long peace among great powers since 1945, calling it "a remarkable

record, unparalleled in modern history." He adds that it is "likely to continue to be 'relevant' to the stability of the international system."[51] Based on a careful examination of Soviet Politburo records, Russian historian Victor Gobarev concludes that America's unique nuclear deterrence capabilities "counterbalanced" Soviet local conventional superiority and were "the single most important factor which restrained Stalin's possible temptation to resolve the [1948–49] Berlin problem by military means. Evidence obtained from [Soviet] oral history clearly supports this fact."[52] Historical evidence does *not* indicate that deterrence is infallible but that nuclear weapons have contributed uniquely to the deterrence of war and escalation in the past.[53]

Thomas Schelling, one of the twentieth century's most prominent deterrence theorists and a Noble laureate, offered his observation regarding the nuclear disarmament narrative as popularized after the Cold War. It illustrates a realist's skepticism and the basis for that skepticism; that is, he points to the continuing value of nuclear deterrence in an anarchic system:

> Why should we expect a world without nuclear weapons to be safer than one with (some) nuclear weapons? . . .
>
> I have not come across any mention of what would happen in the event of a major war. One might hope that major war could not happen without nuclear weapons, but it always did. . . .
>
> . . . Every responsible government must consider that other responsible governments will mobilize their nuclear weapons [production] base as soon as war erupts, or as soon as war appears likely, there will be at least covert frantic efforts, or perhaps purposely conspicuous efforts to acquire deliverable nuclear weapons as rapidly as possible. And what then?
>
> This [existing] nuclear quiet should not be traded away for a world in which a brief race to reacquire nuclear weapons could become every former nuclear state's overriding preoccupation."[54]

As Schelling's comment suggests, many realists consider a "nuclear world" in which deterrence is the policy guide to be safer than a nuclear-disarmed world. Waltz elaborates on the rationale for this conclusion: "[Nuclear weapons] make the cost of war seem frighteningly high and thus discourage states from starting any wars that might lead to the use of such weapons. Nuclear weapons have helped maintain peace between the great powers and have not led their few other possessors to military adventures. . . . Wars become less likely as the costs of war rise in relation to possible gain."[55] The great contribution of nuclear weapons to peace and stability is that, when properly deployed, they can preclude a would-be

aggressor's expectation of gain. And, if conflict occurs, the presence of nuclear weapons can limit its likely escalation.[56] Indeed, Waltz contends that the disarmament narrative's emphasis on the destructive consequences of nuclear war "has obscured the important benefits [nuclear weapons] promise to states trying to coexist in a self-help world."[57] A recent editorial discussing British nuclear weapons appearing in the *Times of London* captures this realist position concisely: "Britain's nuclear arsenal is periodically a matter of political controversy but no responsible government would lightly give up a deterrent. In an anarchic international order, the risks of abandoning it would be incalculable."[58]

Conflicting Philosophies and Conflicting Definitions

The key point here is that the fundamental difference separating the competing narratives on nuclear disarmament often reflects their very different interrelated conceptions of the international system, the potential for a cooperative transformation of the existing anarchic international system, and the value of nuclear deterrence. These varying philosophical foundations underlie competing conclusions about the feasibility of global nuclear disarmament and the prudence of pursuing it as the priority goal.

Carr explained the fundamental differences between realists and idealists ("utopians" in Carr's terms) and the all-encompassing effect of those differences. He observed that "the two methods of approach—the [idealist] inclination to ignore what was and what is in contemplation of what should be, and the [realist] inclination to deduce what should be from what was and what is—determine opposite attitudes towards every political problem."[59] These differences are displayed in contending narratives regarding nuclear disarmament.

These narratives involve different expectations about human decision-making and what is and is not possible with regard to the structure of the international system. Seeing the evidence of history and enduring patterns of human behavior, realists argue that the needed transformation of the international system to enable nuclear disarmament is not plausible. The realists' skepticism is based not on ignorance or malevolence, but on the inescapable constraints that an anarchic system places on prudent leadership: if some national leaders continue to deem nuclear weapons necessary for their state's security—and thus will not part with them—others will be compelled to do likewise.

In contrast, the idealist disarmament narrative posits that the future can be fundamentally different as reason and the global threat of nuclear weapons compel leaders and peoples toward unprecedented cooperative

steps and the transformation of the international system. It is not thought-less sentimentalism; it sees nuclear disarmament as both a possible dynamic for that transition process and a consequence of it.

These realists and idealists consequently bring different speculative assumptions to the question and see fundamentally different goals and actions as reasonable for national decision-making. Realists see national leaders as continually compelled by security concerns to pursue state power, potentially including nuclear power, as prudent and necessary to address those concerns. Idealists see the continuing national accumulation of power, particularly including nuclear power, as the greatest security threat confronting all humankind. They thus seek to marshal global popular and elite opinion in opposition to nuclear weapons in the expectation that general nuclear disarmament is feasible and necessary for global security. These fundamentally conflicting realist and idealist perspectives include (1) the character of the international system; (2) the source of greatest risk to states in the system; and (3) the constitution of prudent, reasonable behavior for national leaders. Diverging views drive incompatible conclusions about the wisdom and feasibility of global nuclear disarmament and the relative value of nuclear deterrence.

In an apparent confirmation of realist claims about the continuing power of the international system's anarchic nature to shape national policies, neither Russia nor China followed the US lead of the past decade promoting nuclear zero.[60] The problem for realists, as Paul Bracken has observed, was that "nuclear abolition—as seen from Moscow, Beijing, Pyongyang—looked like a way to make the world safe for U.S. conventional strong-arms tactics."[61] The deputy commander of US Strategic Command, Vice Adm David Kriete, concludes that following the Cold War

> one of the assumptions made [in 2010] was that Russia is our friend, and if the United States leads the world in reducing the roles of numbers of nuclear weapons, and [its] prominence in our national security policies, then the rest of the world would follow. It's a very noble goal. But the intervening eight years proved to be very difficult because every other country that has nuclear weapons that could potentially threaten the United States or our allies did exactly the opposite.
>
> While the United States actually did reduce the numbers and some of the types of [nuclear] systems, Russia greatly increased [its] number of nuclear weapons, the means that [it has] to deliver them, and most importantly, the prominence that nuclear weapons play in [its] military doctrine.

. . . We saw China increase [its] number of nuclear weapons, and . . . North Korea developed not only a nuclear weapons capability but also, throughout 2017 and 2018, a whole number of ballistic missile launchers of various ranges.[62]

The director of the Defense Intelligence Agency, Lt Gen Robert Ashley, recently remarked that "Russia sees its nuclear weapons as the ultimate guarantor of the country's survival, perceives a warfighting role for [their] use, and directs its scarce resources to its nuclear modernization effort. . . . China is likely to double the size of its nuclear stockpile in the course of implementing the most rapid expansion and diversification of its nuclear arsenal in China's history."[63]

Russian leaders clearly continue to see nuclear weapons as essential to Russia's security and are unwilling to forego them in a dangerous world. American general Curtis Scaparrotti, former NATO Supreme Allied Commander, indicates that Russia values and modernizes its nuclear weapons arsenal as the means necessary to succeed against the United States. This view, he says, "facilitates Moscow's mistaken belief that limited nuclear first use, potentially including low-yield [nuclear] weapons, can provide Russia a coercive advantage in crises and at lower levels of conflict."[64] Andrei Kokoshin, a member of the Russian State Duma and former Russian Security Council secretary, pronounced in 2010, "There will be no alternative to nuclear deterrence even in the distant future."[65] Russian commentator Mikhail Alexandrov captured apparent thinking in Moscow: "Given NATO's clear advantage in conventional armaments, the threat of a nuclear response currently serves as Russia's main deterrent against aggression."[66] Apparently in response to recently expressed US interest in the possibility of further nuclear reductions, the head of the Russian Duma's Committee on International Affairs, Leonid Slutsky, stated, "Balance of powers between Moscow and Washington is based on so-called mutual assured destruction. . . . If it won't be the case anymore, there would be a risk of real war, no more, no less."[67] Correspondingly, Russia's ambassador to the United States, Anatoly Antonov, has emphasized that Russia has no interest in an agreement to limit its new types of nuclear weapons and labeled as "impossible" and "useless" attempts to seek the disarmament of nuclear powers "in defiance of their legitimate security interests."[68]

Jon Wolfsthal, a senior official with responsibility for arms control during the Obama administration, acknowledges that Moscow's mistrust of a powerful United States undermined its possible interest in nuclear disarmament. He indicates that "every time we said we wanted to reduce the

role of nuclear weapons . . . what Russia heard was, we want to be able to do whatever we want with conventional weapons anytime, anywhere."[69] Alexei Arbatov, a well-known Russian national security expert and former senior member of the Russian Duma, also identifies the basic problems in US-Russian relations in realist terms—"political hostilities, intransigence and total distrust."[70]

The consequences of such distrust—seemingly inherent in the anarchic interstate system—are predictable. Given Moscow's perception of threats to its security and distrust of the United States, and with no prospect in sight of a reliable global authority or cooperative interstate system, Russian leaders are unwilling to give up nuclear weapons: "Russia's deterrence potential should be ensured by an efficient modernization of Russia's strategic [nuclear] forces, not by any formal guarantees from the U.S."[71] This stance does not necessarily reflect malevolence on Moscow's part; Russian leaders undoubtedly see no prudent option for nuclear disarmament. Even if others plead benign intentions, intentions can change. Such concerns are the natural consequence of an anarchic system. As Waltz observes, "In international politics . . . friendliness and hostility are transient qualities."[72]

Realism and Idealism in US Nuclear Policy

While the philosophic divide separating realists and idealists is substantial, there can be a convergence of policy views across this divide. For a relatively brief period following the peaceful conclusion of the Cold War and amid widespread, optimistic expectations of a "New World Order," nuclear disarmament rebounded as a contender for US nuclear policy dominance. Some prominent realists adopted the nuclear disarmament agenda—if not the underlying idealist philosophic positions. Indeed, not all disarmament proponents are necessarily idealists. Advocates for nuclear disarmament have included celebrated former US senior officials George Shultz, William Perry, Henry Kissinger, and Sam Nunn, all with extensive national security experience.[73] The promotion of nuclear disarmament by former senior officials, particularly including former Secretary of State Henry Kissinger, illustrates that some influential figures with undoubted realist credentials adopted the goals of the contemporary disarmament narrative.

For realists, acceptance of the nuclear zero goal was based largely on several popular Western post–Cold War notions. First, the collapse of the Soviet Union and relatively benign relations with Russia and China immediately following the Cold War had largely eliminated any serious interstate nuclear threats against the West.[74] Second, nuclear terrorism was now

the serious potential nuclear threat, and counterproliferation measures—not nuclear deterrence—were key to addressing that threat. Finally, US conventional force superiority around the globe allowed the United States to meet its priority security requirements without the need for nuclear weapons.[75]

The apparent realist evolution in favor of nuclear disarmament, however, arose and subsided relatively quickly.[76] As great power relations in the post–Cold War era moved rapidly and unexpectedly in hostile directions, most realist support for the nuclear zero campaign appeared to wane. Realists generally did not believe the transformation of the international system to be forthcoming such that Western security concerns would be addressed by some form of global cooperative or collective security. Rather, for realists, support for nuclear zero was based on the popular view that in the post–Cold War era, nuclear weapons were increasingly irrelevant to US national security within a much-changed security context. For the United States, the security challenges remained, but because the US power position was so overwhelming without nuclear weapons, it could meet them without nuclear capabilities: "In a non-nuclear world, America would enjoy the advantages of geography (the protection afforded by two wide oceans and friendly neighbors in Canada and Mexico), the world's most powerful conventional forces, and an unrivaled network of allies."[77] Some realists thus could conclude that the United States was well positioned to forego nuclear weapons.

Consequently, realists supporting the idealist disarmament agenda had not necessarily embraced idealist thought, per se. Instead, they were able to endorse nuclear disarmament for reasons well within the realist philosophic tradition: as the globe's only "hyperpower," the United States could prudently dispense with nuclear weapons without undermining its own security position.[78] With this construction, some realists could lend their voices in favor of nuclear disarmament. Interestingly, the American conventional force advantages that gave some US realists the freedom to endorse nuclear disarmament had precisely the opposite effect on Russian realists—reflecting again the power of the anarchic structure of the international system to shape national thinking.

The reemergence of great power hostilities and nuclear threats appeared to cool much continuing enthusiasm for the nuclear disarmament agenda among American realists, especially those with national security responsibilities.[79] As Frank Rose, the Obama administration's assistant secretary of state for arms control, observed recently in support of a comprehensive US nuclear modernization program, "The security environment has changed dramatically since President Barack Obama delivered his famous speech

in Prague in April 2009. Instead of joining the United States in expanding efforts to reduce nuclear threats, Russia and China have gone in the opposite direction, investing in new nuclear weapons systems, conventional strike, and asymmetric capabilities." He concludes that "given these realities, it is critical that the United States modernize its strategic nuclear deterrent in a way that reassures allies and enhances strategic stability."[80]

The tension between realism and idealism in US foreign policy can be traced to the country's founding.[81] To a considerable extent, however, there has been a realist consistency in US nuclear policy for decades.[82] Throughout the Cold War, as now, the global threat of nuclear weapons clearly animated an idealist disarmament orientation in much of the academic and popular commentary regarding nuclear weapons. But with a few brief exceptions, Republican and Democratic administration officials have brought realist thought to the US nuclear policy table. The manifest nuclear threat to the United States and allies posed by the Soviet Union during the Cold War undoubtedly encouraged official thinking toward realism, but much less so academic thinking. Sir Michael Howard helps to explain why:

> Nobody who has been brought into contact with that inner group of civil and military specialists who are responsible for the security of this country can fail to notice the almost physical pressure exerted on them by that responsibility, affecting their processes of thought (and often their manner of speech) in much the same way as the movements of a man are affected when he tries to walk in water. . . . They share a common skepticism as to the possibility of disarmament, or indeed of the creation of any effective international authority to whom they can turn over any portion of their responsibilities.

He adds the critical point that "the impatient onlookers, who have never themselves been plunged into that element, cannot understand why."[83]

In an apparent official US embrace of nuclear disarmament, the 1968 Non-Proliferation Treaty, a treaty to which the United States is fully committed, calls on each party "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament." However, immediately following that text in Article VI is the proviso "and on a Treaty on general and complete disarmament under strict and effective international control."[84]

Even the most dowdy realist can embrace the call for nuclear disarmament in the context of "general and complete disarmament under strict and effective international control." How so? The condition of "general and complete disarmament under strict and effective international con-

trol" must presume that the international order has been transformed and that a reliable form of global collective security has been established—effectively mitigating the interstate security dilemma. With the assumption of such a transformed international order, realists can easily support nuclear disarmament—even while doubting that such an order is ever likely to be established—because security concerns and interstate armed conflict would no longer be an enduring feature of the international system.

President Obama's famed 2009 Prague speech emphasizing nuclear disarmament also suggests an official embrace of the idealist agenda: "The United States will take concrete steps towards a world without nuclear weapons." However, President Obama's endorsement of nuclear zero was followed immediately by a realist caveat: "Make no mistake: As long as these [nuclear] weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies."[85]

For those officials responsible for national security, global concepts based on the expectation of unprecedented and near-universal consensus and cooperation are likely to appear very distant and fragile given the external threats they must confront. As one Air Force general officer quipped regarding the prospect of nuclear disarmament, "I hope that day comes. I hope that day comes soon. And when it does, I want to invite you all over to my house for a party. I'd just ask that you don't feed any of the hors d'oeuvres to my unicorn."[86]

Reasoned Dialogue, Debate, and Reconciliation?

There are numerous consequences of the connections between realist and idealist thought and contending nuclear narratives. Perhaps the most obvious is its effect on the character of the internal US debate about nuclear disarmament. Nuclear disarmament advocates and their realist skeptics typically talk past each other, including in academic settings.[87] Engagements intended to compare and openly discuss conflicting ideas and arguments—with the goal of enhanced mutual understanding and possibly finding some points of congruence and agreement—are rare. The notion that "iron sharpens iron"—that each side can learn from the other—appears to have been lost.[88] Instead, a result of this seemingly irreconcilable divide is that nuclear idealists and realists typically engage only within their own closed circles and echo chambers. Two mutually exclusive positions are expressed vocally and repetitively, with little reference to the other except as a foil against which to argue. As in the past, idealists advance a global solution to a critical concern, that concern now being the

existence of nuclear weapons. Realists often respond with great skepticism regarding the feasibility—and thus the wisdom—of an idealist global solution. As in the past, idealists counter that their solution "must be made to work because the consequences of its failure to work would be so disastrous."[89] Technology advances, but this familiar realist and idealist juxtaposition remains unchanged.

Instead, these contending realist and idealist narratives often portray each other as contributing to the respective security threats that concern them most. Indeed, the occasionally expressed disdain each side has for the other—built on seemingly irreconcilable differences—can be palpable. In a relatively small policy community, this gulf appears to have long cooled much enthusiasm for reasoned, amicable discourse. Idealists often appear to see realists as acting from bad or foolish intent to prevent reasonable and prudent movement toward global transformation and nuclear disarmament.[90] Some seem to doubt even the possibility of principled, thoughtful realist opposition to their disarmament agenda and deem realists who are critical as being hardheaded, hard-hearted, or psychologically deficient. How else to explain realist skepticism of the obviously unalloyed moral good of pursuing global transformation and nuclear disarmament as the priority goal? Because realists see a continuing security concern, they often appear to consider idealist disarmament initiatives as naïvely threatening US deterrence capabilities and security in a dangerous, anarchic international environment. These initiatives threaten the "comfort" that Waltz suggests resides in "the fact that history has shown that where nuclear capabilities emerge, so, too, does stability."[91]

Each side can view the other as being an obstacle to decisions and actions that are obviously prudent and necessary to preserve security—with many idealists advocating from a global perspective for changed national behavior and many realists seeking instead to preserve national power given the continuing insecurity of global anarchy. Their differences following from their conflicting philosophical moorings appear largely irreconcilable, allowing little margin for a possible middle ground. But that appearance could give way—to some extent—to sincere, amicable efforts to find synthesis.

Summary and Conclusion

Realism and idealism posit contrary basic beliefs about human decision-making and the character of interstate relations. Referencing history, realists tend to focus on the constraints an anarchic international system and established patterns of human decision-making place on interstate

behavior—compelling national leaders to prioritize power in response to the security threats inherent in an anarchic system. In contrast, idealists see the dangers of an anarchic system and focus on the priority goal of transforming it—a goal they deem feasible if national leaders will follow reason and enlightened self-interest. These contrary realist and idealist starting points lead to very different conclusions about what constitute reasonable national goals and prudent behavior.

Applied to nuclear policy, idealist thought for decades has been the basis for a series of largely academic proposals for the transformation of international relations and nuclear disarmament. US Cold War declarations about nuclear policy often reflected idealist aspirations, but US maintenance of a powerful nuclear arsenal generally reflected persistent realist thought. The Cold War ended peacefully with the collapse of the Soviet Union and its Warsaw Pact alliance. However, in a seeming confirmation of the realist description of international relations and the power of security concerns to shape behavior, neither Russia nor China embraced the Western post–Cold War nuclear disarmament campaign.

The dilemma that now confronts us is that both idealism and realism appear to have captured truths about what should be and what is, respectively. The idealist's contemporary focus on the humanitarian consequences of nuclear war surely is valid: the risks to humanity of the employment of nuclear weapons are simply so extreme in so many scenarios that nuclear war must be prevented. However, the contention that nuclear disarmament is the answer and correspondingly that nuclear deterrence must be demoted presumes that the necessary cooperative transformation of the interstate system is likely within a meaningful timeframe. Yet degrading nuclear deterrence now in favor of transformation and disarmament risks "waiting for Godot" because also valid is the realist's basic contention that the timely transformation of the interstate system needed for cooperative global nuclear disarmament appears implausible in the extreme. Why? Because as John Mearsheimer concludes with understatement, "It is unlikely that all the great powers will simultaneously undergo an epiphany."[92] The apparent tranquility of the immediate post–Cold War period that led many to optimism in this regard no longer exists.

The two truths that nuclear war must be prevented and that the global transformation needed for disarmament perpetually appears to be nowhere in sight mean that—at least for the contemporary period of resurgent nuclear threats to the West—a dowdy realist conclusion holds: deterrence combined with diplomacy is the least miserable option now available to prevent nuclear war. While it may seem counterintuitive, the

goal of precluding nuclear conflict to the extent possible does not necessarily point to the wisdom of prioritizing a nuclear disarmament policy. It is not the path when, in an enduringly anarchic international system, US disarmament moves could degrade the functioning of deterrence and thereby increase the risk of war. Every prudent step must be made to ensure that deterrence is as secure, credible, reliable, and safe as possible. Yet, prioritizing credible deterrence certainly is compatible with complementary diplomacy.

These conclusions—that sustaining credible nuclear deterrence is likely a safer alternative than devaluing it in serious expectation of timely international transformation and nuclear disarmament—admittedly reflect speculation about alternative futures that is based on the manifest resilience of the international system's anarchic structure and inference from history and patterns of leadership behavior.[93] Such speculation is resistant to serious probabilistic prediction. However, given contemporary threats to the West, including nuclear, the premature demotion of nuclear deterrence could indeed unintentionally precipitate its failure. Others obviously disagree with these conclusions—hence the potential value of a worthy debate vice dueling monologues.

With the Cold War long over and the subsequent great optimism about a New World Order long gone, it remains to be seen whether realists and idealists will now begin to engage each other on nuclear policy issues at the level of ideas and with a degree of mutual respect and decorum or will continue to engage largely within their own respective closed circles. The path of least resistance favors the latter. If so, the character and content of the US nuclear "debate" will almost certainly remain a matter of competing voices repetitively talking past one another.

In contrast, those participating in the marketplace of ideas regarding nuclear disarmament could, without acrimony, identify and defend to the extent possible the realist and idealist philosophic foundations of their competing positions. For example, realists must explain why we should limit our expectations regarding future leadership decision-making and states' behavior to established patterns, past and present. Why is the prospect for timely profound change of the international system for the better so remote as to be implausible? There are some past examples of profound changes in the structure of human relations, such as the creation of the nation-state system itself. Why then is the systemic transformation envisaged by idealists implausible?

Idealists in turn must explain why, at this point in history, we should seriously expect diverse national leaderships to achieve the enlightened

interstate trust, consensus, and cooperation needed to transform the international order and disarm—beyond the unconvincing assertions that it can happen because it must or because "no law of nature stands in the way." No law of nature precludes the cooperative resolution of conflicting interests within individual state borders wherein some form of central authority exists. But it would seem imprudent for government officials to plan as if horrific domestic criminal violence—which claims approximately 500,000 lives every year globally—will end anytime soon by the application of reason and enlightened self-interest.

An engagement so emphasizing the transparency of the different philosophic origins underlying contending positions on disarmament and deterrence would likely demand an unprecedented level of introspection on the part of many participants. The competing realist and idealist positions could well remain irreconcilable. Nonetheless, greater transparency regarding the philosophical origins and logic of these dueling positions and their most significant points of departure would add substance to the typically superficial language and callings that often dominate public discussions. It would help give leaders and policy makers the privilege of making more informed comparisons of the veracity of these competing positions. **SSQ**

Notes

1. Hans Morgenthau, *Politics among Nations: The Struggle for Power and Peace* (New York: Alfred Knopf, 1962), 3.

2. Arnold Wolfers, "The Pole of Power and the Pole of Indifference," in James Rosenau, ed., *International Politics and Foreign Policy* (London: The Free Press, 1969), 175.

3. Robert Crawford, *Idealism and Realism in International Relations: Beyond the Discipline* (London: Routledge, 2000), 15.

4. Crawford, 4.

5. Beatrice Fihn, "Confronting Russia's Nuclear Aggression," *U.S. News and World Report*, 5 March 2019, https://www.usnews.com/.

6. See, for example, Richard Falk and David Krieger, *The Path to Zero* (Boulder, CO: Paradigm Publishers, 2012).

7. David Cortright and Raimo Väyrynen, *Towards Nuclear Zero* (New York: Routledge, 2010), 20.

8. Kenneth Waltz, *Man, the State, and War: A Theoretical Analysis* (New York: Columbia University Press, 1959), 159.

9. For exceptions to this rule see Campbell Craig, *Glimmer of a New Leviathan* (New York: Columbia University Press, 2003); Colin Gray, "Through a Missile Tube Darkly: 'New' Thinking about Nuclear Strategy," *Political Studies* XLI, no. 4 (1993): 661–71; John Deutch, "The Future of the U.S. Nuclear Deterrent," *The National Interest*, 4 April 2017, https://nationalinterest.org/; Rebeccah Heinrichs, "U.S. Foreign Policy Is Overdue for Some Realism," *RealClearDefense*, 16 August 2015, https://www.realcleardefense.com/; and Keith Payne, "US Nuclear Weapons and Deterrence: Realist versus Utopian Thinking," *Air and Space Power Journal* 29, no. 4 (July–August 2015): 63–71, https://www.airuniversity.af.edu/.

10. For a useful discussion of a UN-enforced global "cooperative security" regime reached via international consensus and consent that military preparation will be limited to territorial defense, see Ashton B. Carter, John D. Steinbruner, and J. William Perry, *A New Concept of Cooperative Security* (Washington, D.C.: Brookings Institution, January 1992), 7–20.

11. In 2015 Rose Gottemoeller, the under secretary for arms control and international security, said that the world had avoided nuclear war "because we created an intricate and essential system of treaties, laws and agreements that control the world's most destructive weapons." She added, "Our goal is a safe and secure world without nuclear weapons and we are capable of getting there." See Rose Gottemoeller, "Arms Control Priorities for Russia and the United States in 2015 and Beyond" (remarks, Exchange Monitor's Seventh Annual Nuclear Deterrence Summit, Washington, D.C., 18 February 2015), US Department of State, https://2009-2017.state.gov/.

12. The White House, Office of the Press Secretary, "Address by President Obama to the 71st Session of the United Nations General Assembly," 20 September 2016, https://obamawhitehouse.archives.gov/.

13. Edward Hallett Carr, *The Twenty Years' Crisis, 1919–1939* (New York: Harper and Row, 1964), 26.

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15. See Marion William Boggs, *Attempts to Define and Limit "Aggressive" Armament in Diplomacy and Strategy*, University of Missouri Studies 16, no. 1 (Columbia: University of Missouri, 1941).

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Francis Gavin rightly notes, "The nuclear field . . . seems especially divided and stovepiped into various tribes. Nuclear policy is discussed in fundamentally different ways in different settings." Francis J. Gavin, "We Need to Talk: The Past, Present and Future of U.S. Nuclear Weapons Policy," War on the Rocks, 2 January 2017, https://warontherocks.com/.

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The Shadow of Exit from NATO

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Abstract

President Donald Trump has not been shy about trying to coerce close allies. This inclination has led to concerns that the president poses a unique threat to American alliances. Theoretically, these concerns are consistent with an influential line of argument pointing to strategic restraint and reassurance—via binding institutions—as what sets American alliances apart. However, the Trump presidency is not the first time that the shadow of exit has hung over the United States' commitment to Europe. Indeed, a closer look at the North Atlantic Treaty Organization's (NATO) formative period shows that the United States actively considered leaving Europe throughout the 1950s. Even after resigning itself to staying in the early 1960s, the United States used threats of abandonment to put down the Franco-German revolt—the most significant challenge to its preponderant position in the NATO alliance. The primary implication is that American alliance relations have been characterized by more uncertainty—and less restraint and reassurance—than institutionalists have cared to emphasize, which paradoxically suggests that NATO, and the United States' broader alliance network, is robust enough to survive President Trump's attempts at coercion.

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A prominent line of argument points to institutions as what sets American alliances apart. John Ikenberry, in particular, has claimed that the United States has had to engage in strategic restraint to reassure weaker states that it would not dominate or abandon them.[1] Otherwise, he notes, they would have incentives to balance against American power. Accordingly, the United States has gone out of its way to restrain itself and build a cooperative framework characterized by binding institutions. Doing so, in turn, has made weaker states—like those in Europe—amenable to American leadership.[2] "American power is made more acceptable to other states because it is institutionalized," as Ikenberry has argued.[3] As a liberal democracy, the United States has been uniquely well positioned to engage

in strategic restraint and bind itself via institutions; this ability explains the persistence of American-led alliances. "American power," according to Ikenberry, "is not only unprecedented in its preponderance but it is also unprecedented in the way it is manifest within and through institutions. This helps explain why it has been so durable."[4]

In direct contradiction to the institutionalist logic, President Trump has not been shy about coercing even close allies. This inclination has led to concerns that the president poses a unique threat to American alliances. The concern is especially acute in the case of the North Atlantic Treaty Organization (NATO), the United States' mainstay alliance in Europe. Rather than underline NATO's value, as his predecessors have done, Trump has embraced the possibility that the United States might exit the alliance at some point to wring concessions on issues of interest such as allied defense spending and terms of trade.[5] Trump's critics fear that his hardball tactics will drive a wedge between the United States and its European partners, endangering the transatlantic alliance. By signaling such disregard for NATO as an institution, his critics claim, Trump calls into question the institutional commitments that have been at the heart of the American-led order.[6]

The fact is, the Trump presidency is not the first time the shadow of exit has hung over the United States' commitment to Europe. Indeed, a closer look at NATO's formative period shows that the United States actively considered leaving Europe throughout the 1950s. Even after resigning itself to staying in the early 1960s, the United States used threats of abandonment to put down the Franco-German revolt—the most significant challenge to its preponderant position in the NATO alliance. The primary implication is that American alliance relations have been characterized by more uncertainty—and less restraint and reassurance—than institutionalists have cared to emphasize. This consequence paradoxically suggests that NATO, and the United States' broader alliance network, is robust enough to survive President Trump's attempts at coercion.[7]

The remainder of this article examines NATO's formative period in more detail, offering a corrective to the institutionalist account. The conclusion underscores an important implication for policy: less reassurance can sometimes be more.

The Formative Shadow of Exit

The institutionalist logic should readily explain NATO's formative period, from the late 1940s to the early 1960s. According to institutionalists, this was a period when "American power was both tied down and bound

to Europe" by way of institutions like NATO. In effect, NATO served to reassure European allies that the United States would neither dominate nor abandon them.[8] However, a shadow of exit hung over the US commitment to Europe during the early Cold War. Throughout the 1950s, under Presidents Harry Truman and Dwight Eisenhower, the United States saw its leadership role on the continent as a temporary expedient. As soon as European integration had proceeded far enough for a "third force" to emerge capable of balancing Soviet power on its own, the United States would withdraw from its forward positions and recede into the background. Moreover, the United States was not above threatening its European allies with abandonment when they failed to embrace the integration project with sufficient zeal. Most famous in this regard is the "agonizing reappraisal" that John Foster Dulles, secretary of state under Eisenhower, warned about in December 1953. In fact, an enduring American commitment to Europe was not solidified until the early 1960s, under President John F. Kennedy.[9] Even Kennedy, however, threatened to withdraw all US troops from Europe unless West Germany dialed back on security cooperation with France, which jeopardized the preponderant position that the United States demanded in the NATO alliance as the price for it staying.

The Problem: Abandonment, Not Domination

Ikenberry, the leading institutionalist, is onto something when he argues that the United States was a "reluctant hegemon" in the post–World War II period.[10] Especially important is his point that prospective allies in Europe worried more about abandonment than domination and worked hard to secure robust American security commitments.[11] Reluctant hegemon, however, does not go far enough: it understates how determined the United States was to leave Europe once the balance of power was restored there. As important, the emphasis on strategic restraint and reassurance glosses over instances in which the United States threatened exit to wrest concessions from its European partners on the terms of its engagement—most crucially in putting down the Franco-German revolt of 1963. "American power," according to Ikenberry, "was both tied down and bound to Europe" during the early Cold War period.[12] The claim here is that European allies had good reason to doubt the extent to which this was true, doubts that the United States fanned for its own benefit.

The US Commitment to Europe: Permanent or Temporary?

NATO, to paraphrase its first secretary general, was created in the late 1940s to "keep the Russians out, the Americans in, and the Germans

down."[13] What is striking is how long it took the United States to reconcile itself to this fact: it was only in the early 1960s that the United States came to see its security commitment to Europe as more than a temporary expedient. This mind-set is a prominent theme in recent Cold War historiography, much of it inspired by Marc Trachtenberg's path-breaking account *A Constructed Peace*.[14] James McAllister, for one, describes the idea that American military forces would permanently ensure European stability as "unthinkable" in the 1940s and 1950s. The historical record shows, instead, that "American policymakers from Franklin Delano Roosevelt to Dwight Eisenhower strenuously tried to avoid having the future of Europe dependent on a permanent U.S. military presence on the continent."[15] Mark Sheetz concurs, noting, "Postwar American statesmen, such as Kennan, Dulles and Eisenhower, did not want European stability to be permanently dependent on the presence of American forces. They did not want to assume the burden of defending Europe permanently against the Soviet Union, nor did they want to serve permanently as Europe's protector against a possible resurgence of German power. The purpose of America's 'temporary' intervention in Western Europe was to eliminate the need for 'permanent' intervention."[16] In 1991 Trachtenberg himself observed, "During the crucial formative period in the early 1950s, everyone wanted a permanent American presence in Europe—everyone, that is, except the Americans themselves. It is hard to understand why the intensity and persistence of America's desire to pull out as soon as she reasonably could has never been recognized, either in the public discussion or in the scholarly literature, because it comes through with unmistakable clarity" in government documents.[17]

If the United States intended its commitment to Europe to be temporary, how did it propose to solve the double containment problem that was at the heart of the Cold War? That is, how did it propose "to keep the Russians out and the Germans down"? The hope was that European integration would yield a third force on the continent, solving the double containment problem and allowing American forces to withdraw. McAllister, again, captures the thrust of US policy: "America's overarching goal after 1947 was to create a united Western Europe that could contain Germany and balance against the Soviet Union without a permanent U.S. military presence." For US policy makers, "Western European unity was the 'skeleton key' that would permanently end the German problem and enable the region to become a third great center of power able to stand on its own without U.S. military forces continually serving as either a 'pacifier' or 'protector.' "[18] Sheetz reaches similar conclusions. "The Marshall Plan and

NATO," he argues, "were designed to unify Western Europe, solve the German problem, and restore a rough balance on the European continent. The United States would then be able to relinquish responsibility for European security."[19] The key point is that the United States was pulled into the NATO system only reluctantly; the goal, at least through the 1950s, was not to stay in Europe but to leave once a third force had emerged.[20]

The Agonizing Reappraisal

No American policy maker was more determined to leave Europe than Eisenhower. The basic concept of Eisenhower's grand strategy, as Brendan Green relates, was the third force: "The United States would build Western Europe into an independent pole of power that could balance the Soviet Union by itself. The United States would then pass the buck, withdrawing its forces from the continent and positioning itself as the balancer of last resort."[21] Eisenhower pinned his hopes, in particular, on the European Defense Community (EDC), a treaty integrating the militaries of France, West Germany, and the Benelux states. If successful, the EDC would represent a local solution to the double containment problem, harnessing West German military power against the Soviet threat but with supranational controls to ensure that West Germany did not get too independent or powerful.[22] This strategy in turn would free the United States from having to make a long-term commitment to defend Europe, either from the Soviet Union or from a rearmed West Germany. For Eisenhower, avoiding such a commitment was imperative.[23] In February 1951, newly installed as the Supreme Allied Commander, Europe, Eisenhower wrote an associate, "There is no defense for Western Europe that depends exclusively or even materially upon the existence, in Europe, of strong American units. The spirit must be here and the strength must be produced here. We cannot be a modern Rome guarding the far frontiers with our legions if for no other reason than that these are *not*, politically, *our* frontiers. What we must do is to assist these people [to] regain their confidence and get on their own military feet" (emphasis in original).[24] For Eisenhower, the stationing of American troops in Europe was "a temporary expedient," "a stop-gap operation" meant to bridge the gap until the EDC brought a third force into being.[25]

The problem for Eisenhower was that the Europeans—the French in particular—had strong incentives to drag their feet on the EDC, correctly suspecting that the intended end-state was an American withdrawal that would leave them alone on the continent with the Soviet Union and a rearmed West Germany. For the French, an American military commitment

was more attractive than the EDC. As Sebastian Rosato has argued, "A large American troop presence would protect western Europe from the Soviet Union and also contain the Germans, who could therefore be re-armed to the benefit of the West without threatening France," all without France having to surrender sovereignty to a supranational institution.[26] Frustrated by French intransigence, Dulles, an outspoken proponent of the EDC, resorted increasingly to threats to break the logjam. Most famous is the warning he delivered to the North Atlantic Council on 14 December 1953 that if the EDC were to fail, "there would be grave doubt whether continental Europe could be made a place of safety," which "would compel an agonizing reappraisal of basic United States policy."[27] It was widely understood that such a reappraisal would point toward a with-drawal from Europe. More precisely, the implied threat was that the United States would abandon the forward defense of the continent and adopt instead a peripheral strategy primarily reliant on airpower.[28] As Dulles explained to the Joint Chiefs of Staff in a January 1953 meeting, "If the French and Germans should come to see that the military position would be tolerable for us if we could hold Turkey, Spain, etc., that would create pressures on them which would not exist if they think we are so committed that we must carry the entire load in the area."[29]

Given that the Eisenhower administration never followed through on its threats, it is tempting to write off the agonizing reappraisal as a calcu-lated bluff.[30] After all, the EDC died on 30 August 1954, with the French legislature rejecting the treaty on a procedural vote. Rather than abandon forward defense, the Eisenhower administration assented to an alternative arrangement—pushed by the British—whereby West Germany would join NATO with safeguards. Even factoring in the EDC's demise, how-ever, the agonizing reappraisal should not be discounted. First, as McAllister has argued, Dulles's remarks may have been calculated, but they were not a bluff. Rather, they "accurately represented his deepest beliefs about the need for Europe to move on toward greater unity as a sheer matter of self-preservation as well as his fears about what would happen in the event the EDC did not come into being."[31] Second, the agonizing reappraisal was taken seriously by at least one key audience, the British, prompting them to break with a tradition of nonentanglement and make a long-term commitment to the defense of Europe.[32] The British commitment, in turn, was a crucial ingredient in the NATO system that ultimately substituted for the EDC. Finally, the agonizing reappraisal demonstrates that the United States was willing to threaten withdrawal from Europe even dur-ing the most intense phase of the Cold War.

The Franco-German Revolt

With the benefit of hindsight, it is safe to conclude that Eisenhower overreached in his aspirations for a third force and the withdrawal of American troops from Europe.[33] His successor, Kennedy, was more amenable to a long-term commitment to NATO as the price that had to be paid for an enduring solution to the double containment problem. In return, Kennedy insisted on centralizing control over alliance policy, especially when it came to nuclear weapons, generating conflict with France. Exploiting the shadow of exit, Kennedy threatened to abandon West Germany when it appeared to be following France's lead. These threats were potent enough to put down the Franco-German revolt and lock in the United States' preponderant position in the NATO alliance.

Kennedy's Approach to Europe

Kennedy, unlike Eisenhower, considered an American military commitment to Europe as inescapable, at least if the double containment problem was to be solved.[34] A third force had not emerged to provide a counterweight to the Soviet Union—and might not be desirable in the first place if it meant a West Germany with too much power and independence. Only the forward presence of American forces on European soil would suffice to check the Soviets while keeping German power limited. In return, Kennedy insisted on centralizing control over alliance policy; especially important was that West Germany not acquire independent control of nuclear weapons.[35] The flexible response doctrine, for example, is best seen as a strategic rationalization for reasserted American control over NATO nuclear weapons, and thus a repudiation of the nuclear sharing policy that had come to characterize Eisenhower's approach to the issue.[36] Kennedy's basic stance, captured by Green, was that "if the United States was going to defend Europe, it was going to call the military and political shots."[37] The United States could not, Kennedy insisted, "accept the notion that we should stay out of all of Europe's affairs while remaining ready to defend her if war should come."[38] The United States would not issue that kind of blank check.

Putting Down the Franco-German Revolt

Kennedy's warning was directed above all at the French, who were increasingly assertive about voicing their displeasure with the centralizing thrust of American policy. French president Charles de Gaulle, in particular, was attracted to the idea of a "European" Europe led by France. France,

de Gaulle felt, should continue to enjoy the American security guarantee but otherwise should take the lead in settling political questions like the status of Germany. Kennedy, as we have already seen, rejected this way of thinking, setting up a collision with de Gaulle.[39] De Gaulle's intransigence, in turn, emboldened the West Germans to dig in their heels on the nuclear issue, with West German chancellor Konrad Adenauer ruling out a nonnuclear status for West Germany as part of a Berlin settlement.[40]

Matters between Kennedy, on the one hand, and de Gaulle and Adenauer, on the other, came to a head in early 1963. On 14 January 1963, de Gaulle inaugurated an open revolt against the United States, vetoing Britain's admission to the European Economic Community (EEC). De Gaulle's fear was that Britain would act as a Trojan horse for the United States, warning in a press conference that the continental countries would eventually be absorbed into a "colossal Atlantic community dependent on America and under American control" in the event Britain was let into the EEC.[41] Even more provocatively, de Gaulle and Adenauer signed a treaty of friendship one week later, raising the specter of a Franco-German bloc independent of American influence.[42] Kennedy was livid and prepared to believe the worst about de Gaulle, warning his advisers that "we should look now at the possibility that De Gaulle had concluded that he would make a deal with the Russians, break up NATO, and push the U.S. out of Europe."[43]

To preclude this possibility and put down the Franco-German revolt, Kennedy threatened to abandon West Germany unless Adenauer—or a more pliable West German government—sided with the United States over France. "The Germans," as Trachtenberg sums up Kennedy's approach, "had to be told that 'they can't have it both ways.' They had to choose between France and America. If they chose to align themselves with De Gaulle and if they backed the policy of an independent Europe, they could not count on the United States to defend them. If they wanted American protection, they would have to follow the American lead on political and nuclear questions."[44] And, indeed, Kennedy warned Adenauer directly in a February 1963 letter,

> I would be less than frank if I did not convey to you my grave concern over the mounting suspicion in the American Congress and public that this Nation's presence and views are no longer welcome in Europe. Those who feel that $45 billion and 16 years of continuous economic and military assistance have earned us nothing but the hostility of certain European leaders and newspapers are likely to take out their resentment by pressing for a return to restrictive, isolationist concepts that would end

> Western unity and, according to our best military judgment, seriously weaken the security of Western Europe as well as the United States.[45]

While Kennedy went on to say that he would do everything in his power to prevent this trend, the meaning was hardly lost on the West Germans, who in early 1963 watered down the Franco-German treaty with a preamble affirming their loyalty to NATO (and thus to the United States).[46]

West Germany's about-face was crucial because Kennedy was only willing to stay in Europe if the United States was calling the political and military shots. The Cuban missile crisis, just a few months before, had underlined the real risk of war between the United States and the Soviet Union. This reality reinforced Kennedy in his insistence that the United States exercise pre-eminent influence in NATO in exchange for defending Europe.

Less Reassurance Can Be More

Even though the United States actively considered leaving Europe throughout the 1950s, it resigned itself to staying in the early 1960s after securing a preponderant position in NATO. In the current moment, the Trump administration has paired a confrontational approach to alliance management with substantial continuity in core American commitments to European defense. An important implication follows: American alliance relations have been characterized by more uncertainty—and less restraint and reassurance—than institutionalists have cared to emphasize, paradoxically suggesting that NATO and the United States' broader alliance network are robust enough to survive the Trump administration's attempts at coercion.[47]

More generally, it is worth underscoring that there is such a thing as *too* much reassurance. One frequently hears the claim that allies need to be reassured sufficiently that they are not tempted to build up their power as a hedge against American abandonment.[48] A felt need to reassure, in turn, has led policy makers to preoccupy themselves with credibility, to the point of treating reputation as if it were a vital interest. Policy makers, notes historian Robert McMahon, "have argued with remarkable consistency, privately as well as publicly, that demonstrating the credibility of American power and American commitments ranked among the most critical of all U.S. foreign policy objectives." He observes that they indeed "have often evinced as much concern for generalized perceptions of power, reputation, and prestige as they have with the preservation of more tangible interests."[49] One could argue that the United States has fought

multiple wars for the sake of its reputation, most prominently in Korea and Vietnam during the Cold War.[50]

Is reputation, in fact, worth fighting for? To a surprising degree, the evidence cuts against the notion that commitments are interdependent and thus that reputation deserves the importance that policy makers have ascribed to it. An exhaustive review of the literature is beyond the scope of this article, but a safe implication to draw from some of its seminal contributions is that reputation has been overvalued.[51]

Ted Hopf, for example, notes how the United States became involved in various Third World conflicts during the Cold War, more to deter the Soviet Union than to protect any specific interest. Hopf highlights the lessons the Soviets learned from their victories and defeats in these conflicts, finding that "not a single Soviet in twenty-five years inferred anything about American credibility" in the core based on events in the periphery.[52] Political scientist Jonathan Mercer leverages insights from social psychology to generate the counterintuitive argument that states are unlikely to get reputations for either lacking resolve among adversaries or for having resolve among allies. Bolstered by an examination of reputation formation in a series of pre–World War I crises, Mercer concludes, "It is wrong to believe that a state's reputation for resolve is worth fighting for."[53] Daryl Press, finally, pits the past actions theory, which says that the credibility of a state's threats depends on its history of keeping or breaking commitments, against the current calculus theory, which privileges the balance of power and interests. To evaluate these competing theories of credibility, Press examines decision-making during three sets of crises— the "appeasement" crises between Nazi Germany and Britain and France before World War II, as well as Cold War crises between the Soviet Union and the United States over Berlin and Cuba. The cases reveal, Press argues, that "the very same leaders who are so concerned about their own country's credibility that they are loath to back down reflexively ignore the enemy's history for keeping or breaking commitments."[54] Press, like Mercer, ends up concluding that states "should not fight wars for the sake of preserving their credibility."[55]

On the one hand, it is understandable that policy makers take the need for reassurance seriously given the potentially high costs of being seen as an unreliable ally.[56] An overemphasis on reassurance, however, in the form of unduly firm commitments risks entangling the United States in unwanted conflicts. The challenge is to be just reassuring enough that an alliance with the United States remains a desired commodity but not so reassuring that strategic flexibility is eliminated.[57] In other words, policy

makers should balance the natural urge to reassure others about the firmness of American commitments with subtle (and sometimes unsubtle) reminders that exit remains an option, just as they did with NATO in the early Cold War and as the Trump administration is arguably doing now. **SSQ**

Notes

1. G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars* (Princeton, NJ: Princeton University Press, 2001), 271. See also G. John Ikenberry, "Institutions, Strategic Restraint, and the Persistence of American Postwar Order," *International Security* 23, no. 3 (Winter 1998/99): 43–78

2. Ikenberry, *After Victory*; and Ikenberry, "Institutions."

3. Ikenberry, *After Victory*; and Ikenberry, "Institutions."

4. Ikenberry, *After Victory*, 258.

5. Joshua Shifrinson, "Sound and Fury, Signifying Something? NATO and the Trump Administration's Second Year," *H-Diplo/ISSF* [*International Security Studies Forum*] Policy Series: America and the World—2017 and Beyond, 15 July 2018, http://issforum.org/. See also Joshua Shifrinson, "Trump and NATO: Old Wine in Gold Bottles," *H-Diplo/ISSF* Policy Series: America and the World—2017 and Beyond, 29 September 2017, https://issforum.org/.

6. On 23 July 2018, 42 scholars of international relations published a statement in the *New York Times* condemning Trump's attacks on international institutions like NATO. For context, see David A. Lake and Peter Gourevitch, "Hundreds of Scholars Have Signed a Statement Defending the International Institutions That Trump Has Attacked," Monkey Cage Analysis, *Washington Post*, 14 August 2018, https://www.washingtonpost.com/.

7. Patrick Porter and Paul Staniland both make note of this in their wide-ranging critiques of the concept of "liberal order." See Patrick Porter, "A World Imagined: Nostalgia and Liberal Order," Cato Institute Policy Analysis, no. 843 (5 June 2018), https://www.cato.org/; and Paul Staniland, "Misreading the 'Liberal Order': Why We Need New Thinking in American Foreign Policy," *Lawfare*, a blog dedicated to national security issues, published by the Lawfare Institute in cooperation with the Brookings Institution, 29 July 2018, https://www.lawfareblog.com/.

8. Ikenberry, *After Victory*, 265.

9. Making a compelling case that US policy toward Europe shifted from buck-passing under Eisenhower to balancing under Kennedy is Brendan Rittenhouse Green, "Two Concepts of Liberty: U.S. Cold War Grand Strategies and the Liberal Tradition," *International Security* 37, no. 2 (Fall 2012): 9–43.

10. Ikenberry, "Institutions," 63–65; and Ikenberry, *After Victory*, 200–203.

11. Ikenberry, "Institutions," 71; and Ikenberry, *After Victory*, 165–66, 191–99, and 205–10.

12. Ikenberry, *After Victory*, 265.

13. Quoted in North Atlantic Treaty Organization, "NATO Leaders: Lord Ismay," accessed May 2019, https://www.nato.int/.

14. Marc Trachtenberg, *A Constructed Peace: The Making of the European Settlement, 1945–1963* (Princeton, NJ: Princeton University Press, 1999).

15. James McAllister, *No Exit: America and the German Problem, 1943–1954* (Ithaca, NY: Cornell University Press, 2002), 16.

16. Mark S. Sheetz, "Exit Strategies: American Grand Designs for Postwar European Security," *Security Studies* 8, no. 4 (Summer 1999): 27.

17. Marc Trachtenberg, *History and Strategy* (Princeton, NJ: Princeton University Press, 1991), 167.

18. McAllister, *No Exit*, 16, 20. See also Trachtenberg, *History and Strategy*, 164; and Trachtenberg, *Constructed Peace*, 114.

19. Sheetz, "Exit Strategies," 25.

20. Trachtenberg, *Constructed Peace*, 119. Trachtenberg, McAllister, and Sheetz push back against those like Melvyn Leffler and Geir Lundestad who argue that the United States did not want to see an independent "third force" emerge in Europe. See Melvyn Leffler, *A Preponderance of Power: National Security, the Truman Administration, and the Cold War* (Stanford: Stanford University Press, 1992), 17; and Geir Lundestad, *"Empire" by Integration: The United States and European Integration, 1945–1997* (Oxford, UK: Oxford University Press, 1998), 4.

21. Green, "Two Concepts of Liberty," 23–24. On Eisenhower's approach to the Cold War in Europe, see also Trachtenberg, *Constructed Peace*, 147–56; and McAllister, *No Exit*, 210–15.

22. On the power politics surrounding the EDC, see Sebastian Rosato, *Europe United: Power Politics and the Making of the European Community* (Ithaca, NY: Cornell University Press, 2011), chap. 4.

23. Eisenhower feared that the costs of a long-term commitment would threaten American liberties, turning the United States into a garrison state. See Green, "Two Concepts of Liberty," esp. 27.

24. Quoted in Trachtenberg, *Constructed Peace*, 147.

25. Memorandum by the Special Assistant to the President for National Security Affairs (Cutler) to the Secretary of State, 3 September 1953, *Foreign Relations of the United States* (*FRUS*), *1952–1954, National Security Affairs,* vol. 2, pt. 1, doc. 87, https://history.state.gov/. Quoted in McAllister, *No Exit*, 231.

26. Rosato, *Europe United*, 142–43.

27. Editorial Note, *FRUS, 1952–1954, Western European Security*, vol. 5, pt. 1, doc. 462, https://history.state.gov/. See also "Remarks Made by Secretary Dulles in Paris," *The New York Times*, 15 December 1953, 14, https://www.nytimes.com/. As Brian Duchin argues, Dulles's December threat was far from new. See Brian R. Duchin, "The 'Agonizing Reappraisal': Eisenhower, Dulles, and the European Defense Community," *Diplomatic History* 16, no. 2 (April 1992): 202.

28. On forward defense versus the peripheral strategy, see Trachtenberg, *History and Strategy*, 153–60.

29. Memorandum of Discussion of State—Mutual Security Agency–Joint Chiefs of Staff Meeting, 28 January 1953, *FRUS*, 1952–54, vol. 5, pt. 1, doc. 374, https://history.state.gov/. Quoted in McAllister, *No Exit*, 226. At the same time, Dulles recognized that loose talk of redeploying American troops could jeopardize ratification of the EDC. He thus worked, unsuccessfully, to keep a tight lid on Pentagon proposals along these lines. See McAllister, *No Exit*, 230–35, as well as Sheetz, "Exit Strategies," 34.

30. See Duchin, "The 'Agonizing Reappraisal,'" 212, as well as Kevin Ruane, "Agonizing Reappraisals: Anthony Eden, John Foster Dulles and the Crisis of European Defense, 1953–54," *Diplomacy and Statecraft* 13, no. 4 (December 2002): 178.

31. McAllister, *No Exit*, 237–38.

32. Ruane, "Agonizing Reappraisals," 152–54, 160, 172–74.

33. See McAllister, *No Exit*, 243–44; and Sheetz, "Exit Strategies," 40. For a more bullish assessment of Eisenhower's buck-passing approach, see Green, "Two Concepts of Liberty," 41.

34. Trachtenberg, *Constructed Peace*, 284. For a succinct overview of Kennedy's approach to Europe, see Green, "Two Concepts of Liberty," 31–37. Francis Gavin introduces the important caveat that, however open he was to a long-term commitment to Europe, Kennedy was not convinced that large American conventional forces were needed for its defense—with the exception of the anomalous situation in Berlin. In fact, Kennedy seriously considered plans to withdraw US troops from Europe. See Francis J. Gavin, *Gold, Dollars, and Power: The Politics of International Monetary Relations, 1958–71* (Chapel Hill: University of North Carolina Press, 2004), 60, 104–6; and Francis J. Gavin, *Nuclear Statecraft: History and Strategy in America's Atomic Age* (Ithaca, NY: Cornell University Press, 2012), 44–46.

35. Trachtenberg, *Constructed Peace*, 302–15.

36. Trachtenberg, 315–20. Gavin is convincing that flexible response, more rhetorical than real, was targeted at the German problem. See Gavin, *Nuclear Statecraft*, chap. 2, esp. 31, 54–55.

37. Green, "Two Concepts of Liberty," 37.

38. Telegram from the Department of State to the Embassy in France, 18 May 1962, *FRUS*, 1961–1963, vol. 13, *Western Europe and Canada*, doc. 251, https://history.state.gov/.

39. On the escalating disagreement between Kennedy and de Gaulle over how much independence France (and thus Europe) should enjoy within the NATO alliance, see Trachtenberg, *Constructed Peace*, 331–39, as well as Frank Costigliola, *France and the United States: The Cold Alliance Since World War II* (New York: Macmillan, 1992), 126–31; and Frédéric Bozo, *Two Strategies for Europe: De Gaulle, the United States, and the Atlantic Alliance*, trans. Susan Emanuel (Lanham, MD: Rowman and Littlefield, 2001), chap. 3.

40. See Trachtenberg, *Constructed Peace*, 339–42, as well as Gene Gerzhoy, "Alliance Coercion and Nuclear Restraint: How the United States Thwarted West Germany's Nuclear Ambitions," *International Security* 39, no. 4 (Spring 2015): 112–14.

41. Trachtenberg, *Constructed Peace*, 369.

42. Trachtenberg, 371. On the Franco-German revolt, see also Gavin, *Gold, Dollars, and Power*, chap. 4.

43. Summary Record of NSC Executive Committee Meeting No. 38 (Part II), 25 January 1963, *FRUS*, 1961–1963, vol. 13, *Western Europe and Canada*, doc. 169, https://history.state.gov/.

44. Trachtenberg, *Constructed Peace*, 374.

45. Letter from President Kennedy to Chancellor Adenauer, 1 February 1963, *FRUS*, 1961–1963, vol. 13, doc. 65, https://history.state.gov/.

46. Not long after, Adenauer was ousted in favor of the Atlantic-minded Ludwig Erhard. See Trachtenberg, *Constructed Peace*, 377–79; Bozo, *Two Strategies for Europe*, 104–7; and Gerzhoy, "Alliance Coercion and Nuclear Restraint," 115–16.

47. See especially Porter, "World Imagined." On NATO's prospects for weathering the Trump era, see Shifrinson, "Sound and Fury?," 11–15.

48. On the role of assurance in US grand strategy, 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), 91–92.

49. Robert J. McMahon, "Credibility and World Power: Exploring the Psychological Dimension in Postwar American Diplomacy," *Diplomatic History* 15, no. 4 (October 1991): 455, 458. McMahon concludes the article by asking why the United States became so obsessed with its credibility during the Cold War. Of relevance to the argument here, he says that "a significant part of the American fixation with its credibility can be tied to Washington's perceived need to prove itself a dependable ally, one that would never abandon its friends." McMahon, 470.

50. McMahon, 458–60, 466–68.

51. A good primer on the subject is Paul K. Huth, "Reputations and Deterrence: A Theoretical and Empirical Assessment," *Security Studies* 7, no. 1 (Autumn 1997): 72–99. Huth finds weak support in the literature for the strong-interdependence-of-commitments position. See Huth, 91; and Paul K. Huth, "Deterrence and International Conflict: Empirical Findings and Theoretical Debates," *Annual Review of Political Science 2* (1999): 32–34, 41–43.

52. Ted Hopf, *Peripheral Visions: Deterrence Theory and American Foreign Policy in the Third World, 1965–1990* (Ann Arbor: The University of Michigan Press, 1994), 234. Other critiques of Cold War–era interventionism in the Third World include Stephen M. Walt, "The Case for Finite Containment: Analyzing U.S. Grand Strategy," *International Security* 14, no. 1 (Summer 1989): 19–22; and Stephen Van Evera, "Why Europe Matters, Why the Third World Doesn't: American Grand Strategy after the Cold War," *Journal of Strategic Studies* 13, no. 2 (June 1990): 15–31, esp. 23–24.

53. Jonathan Mercer, *Reputation and International Politics* (Ithaca, NY: Cornell University Press, 1996), 1. For a thoughtful critique and the author's reply, see Dale C. Copeland, "Do Reputa-

tions Matter?" *Security Studies* 7, no. 1 (Autumn 1997): 33–71; and Jonathan Mercer, "Reputation and Rational Deterrence Theory," *Security Studies* 7, no. 1 (Autumn 1997): 100–113.

54. Daryl G. Press, *Calculating Credibility: How Leaders Assess Military Threats* (Ithaca, NY: Cornell University Press, 2005), 6.

55. Press, 160. Critics have objected that crisis diplomacy is not the best place to look for the effects of reputation. As Todd Sechser has put it, "The primary effect of a state's reputation may be to prevent a crisis that never happens rather than to influence the outcome of one that does." Reputation, in other words, is most important in the context of general deterrence rather than immediate deterrence. See Todd S. Sechser, "Goliath's Curse: Coercive Threats and Asymmetric Power," *International Organization* 64, no. 4 (October 2010): 654. For a large-N test along these lines, which finds that states that have backed down are substantially more likely to face subsequent challenges, see Alex Weisiger and Keren Yarhi-Milo, "Revisiting Reputation: How Past Actions Matter in International Politics," *International Organization* 69, no. 2 (March 2015): 473–95.

56. Gregory Miller, for example, has argued that states perceived to be reliable allies have greater freedom of action in choosing their alliance partners and in the design of their alliances than states perceived to be unreliable allies. See Gregory D. Miller, *The Shadow of the Past: Reputations and Military Alliances before the First World War* (Ithaca, NY: Cornell University Press, 2012); and Mark J. C. Crescenzi, Jacob D. Kathman, Katja B. Kleinberg, and Reed M. Wood, "Reliability, Reputation, and Alliance Formation," *International Studies Quarterly* 56, no. 2 (June 2012): 259–74.

57. This is another way of saying that the alliance security dilemma—the tension between the fear of abandonment and the fear of entrapment—needs to be carefully managed. On the alliance security dilemma, see Glenn H. Snyder, *Alliance Politics* (Ithaca, NY: Cornell University Press, 1997), 180–92. Stephen Walt notes that the alliance security dilemma should be least worrisome for a unipolar power like the United States, given that it has less need for allies than great powers in bipolarity and multipolarity. See Stephen M. Walt, "Alliances in a Unipolar World," *World Politics* 61, no. 1 (January 2009): 98–99.

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The Belt and Road Initiative: Insights from China's Backyard

Terry Mobley

Abstract

This article examines Xi Jinping's Belt and Road Initiative (BRI), previously known as the One Belt, One Road (OBOR) Initiative. It argues that, in the context of South and Southeast Asia, the BRI represents China's strategic effort to gain predominance in the Asia-Pacific by advancing its influence over countries in the region, overcoming its "Malacca Dilemma," and gaining access to or establishing new ports with the potential to serve commercial and military purposes. The discussion centers on the implementation of the BRI in two South Asian and two Southeast Asian countries that are among those most closely aligned with China. It demonstrates how China's BRI-related actions in these countries represent a strategic effort to improve China's diplomatic, economic, and security interests. Moreover, it includes a review of leading BRI project funding sources to date and potential adjustments moving forward. The discussion closes with a few insights for BRI partner countries as well as recommendations for the United States as it considers a strategic approach to compete with China in the Asia-Pacific.

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The One Belt, One Road (OBOR) initiative, which China retitled the Belt and Road Initiative (BRI), is shorthand for the Silk Road Economic Belt (丝绸之路经济带) and the 21st Century Maritime Silk Road (世纪海上丝绸之路). The BRI is the cornerstone of President Xi Jinping's foreign policy. It is the vehicle through which China intends to increase its connectivity with over 100 countries and international organizations based partly on the historic Silk Road land and maritime routes. The initiative aims to build these linkages through investing in infrastructure, opening transport and economic corridors, and connecting China to other countries "physically, financially, digitally, and socially."[1] The BRI is wide-ranging both geographically and functionally. Geographically, the BRI spans many countries across Asia, Africa, Europe, and the Middle East, as

well as parts of Latin America. While the BRI is linked to trade routes associated with China's historical greatness, the initiative is not geographically constrained and has continued to expand. Also, while infrastructure is a critical element of the BRI—particularly infrastructure that increases China's security and access to resources—so too is increased cultural and social connectivity between China and BRI partner countries.[2]

Early BRI infrastructure investments have resulted in criticism of some of China's practices. The most common complaint is China's use of debt and market traps to "reshape international relations in its favor" by creating BRI partner country dependency.[3] Due to internal political and economic weaknesses, the debt of "more than half the nations listed under BRI are rated 'junk' or not graded."[4] Because of limited options, many of these countries are vulnerable to dependency and economic coercion. Unlike loans from multilateral financial institutions that insist on accountability and reforms, Chinese loans typically lack such strings but instead often require that projects be given to Chinese companies and "at least 50% of material, equipment, technology, or services" be sourced from China.[5]

An October 2018 special report in *China Today* meant to assuage criticisms of the BRI describes the initiative as the embodiment of China's commitment to its international responsibilities. The BRI is further explained as a response to "trade protectionism, unilateralism, isolationism, and other virulent trends" that have damaged the global economy and multilateral trading system, a thinly veiled effort to paint China as a positive alternative to the United States.[6] Likewise, Xi Jinping's speech at the 19th Party Congress argued for shared community and international cooperation, particularly between China and its neighbors—including through the BRI.[7]

Understandably, China intends to use the BRI to improve its economic, political, and security situation. The BRI is praised as a potential economic boon for partner countries, highlighted as China's means of rising peacefully, or criticized as a strategic ploy to gain assets and build influence through diplomatic and economic coercion. Viewed objectively, the BRI deserves both praise and criticism. China has offered loans in environments where other lenders are reluctant to engage. While doing so places some BRI countries in a weak bargaining position, it offers infrastructure investment that otherwise may not be available. The long-term success of the BRI will depend on the ability to strike an equitable balance between China's interests and those of partner nations. The ability of BRI countries to strike that balance depends on their political and economic health, as well as their ability to hedge against excessive dependence on China.

This article argues that, in the context of South and Southeast Asia, the BRI represents China's strategic effort to gain predominance in the Asia-Pacific by advancing its influence over countries in the region, overcoming its "Malacca Dilemma" (the vulnerability of sea-lanes through the Malacca Strait), and gaining access to or establishing new ports with the potential to serve both commercial and military purposes.[8] The article begins by exploring China's shift to a more assertive foreign policy under Xi Jinping. Next, it explores the funding of BRI projects, particularly examining BRI investments in two South Asian and two Southeast Asian countries to illuminate China's approach. It also projects future BRI trends and the potential value of the Asian Infrastructure Investment Bank (AIIB) to improve China's image. Finally, it draws lessons to provide insights for BRI nations while providing recommendations for the United States as it faces increasing competition with China.

BRI = No Longer Biding Time

China's foreign policy under Xi Jinping is more assertive than that of his predecessors, particularly in Asia. During past decades, Chinese leaders followed Deng Xiaoping's guidance to "hide one's capabilities and bide one's time," which they frequently referenced in speeches.[9] In Xi's speech at the 19th Party Congress, that language was nowhere to be found. Instead, Xi used more assertive language, noting that China will "take an active part in reforming and developing the global governance system" and warning that "no one should expect us to swallow anything that undermines our interests."[10] China's more aggressive posture comes at a time when other nations perceive the United States to be stepping back from globalization and multilateral institutions.[11]

Although the term "core interests" is not used in Xi's 19th Party Congress speech, it cites China's "interests" approximately 30 times.[12] While not clearly defined, China's core interests are generally viewed to include Chinese sovereignty, development and security, national reunification, territorial integrity, and the continued centrality of the Chinese Communist Party (CCP).[13] China's regional strategy is more assertive toward core interests and more benevolent toward secondary interests intended to enable China to "achieve its main strategic goal of rising peacefully."[14] This strategy is particularly true in South and Southeast Asia, where sea-lanes, roads, rail, pipelines, and countries that will support Chinese positions in multilateral institutions are all vital to China's economic, political, and security well-being.

The fact that China is no longer biding time is likely related to two factors. First, China's rapid economic growth of the past two decades is beginning to slow. The BRI is an opportunity to reinvigorate growth, reduce energy vulnerability, and increase global presence and prestige while China remains positioned to self-fund many of the initial BRI projects. Also, the BRI is a lifeline to inefficient state-owned enterprises (SOE). Since 2016 SOEs have received 83 percent of loans, mostly from state-owned banks. This statistic is a reversal from 2013, when 57 percent of loans went to private companies.[15] Second, the BRI is a result of China's dissatisfaction with the status quo—at least in its own region—that can be linked to the Obama-era pivot to Asia announced by the United States in 2011. China's military buildup, consolidation of what one author calls the "China model" of control over political and economic decisions, and behavior toward regional institutions all indicate its dissatisfaction with the status quo. [16] The recent US-China trade dispute has only exacerbated China's dissatisfaction with the current state of affairs.

Some scholars argue that China is using "energy mercantilism," facilitated by the BRI and the encouragement of overseas energy sector investments by Chinese companies, as a means to neutralize the United States' ability to use access to oil as a weapon of coercion.[17] Securing multiple energy supply sources and routes, as well as improving the ability to protect sea-lanes and vessels, is important to China's security. With respect to vessels, China is reportedly developing a fleet of "Chinese-owned and Chinese-flagged oil tankers" that some scholars argue may serve as a deterrent by creating potential encounters with Chinese vessels at sea. The argument is that, unlike foreign-flagged vessels, the unwillingness of Chinese vessels to comply with potential blockades would escalate matters to the point it gains the attention of multilateral bodies.[18] China is building relationships both within the region and globally, including Africa, which accounts for around 25 percent of all members of the United Nations General Assembly. Ensuring favorable votes in the United Nations and other multilateral bodies is an element of China's long-term approach to protect its actions in the Asia-Pacific and elsewhere.

Overcoming the Malacca Dilemma is a primary goal of the BRI in South and Southeast Asia. The term "Malacca Dilemma" became widely used after Hu Jintao declared in 2003 that "certain major powers" were intent on controlling the Malacca Strait, which would give them the ability to cut off energy supplies to China.[19] The solution to the Malacca Dilemma described more than a decade ago included "reducing import dependence through energy efficiencies and harnessing alternative sources of power,

investment in the construction of pipelines that bypass the Malacca Strait, and building credible naval forces capable of securing China's SLOCs [sea lines of communications]."[20]

"Overseas strategic pivots" (海外战略支点) in places like Gwadar Sea Port are an important means of addressing SLOC vulnerability.[21] These pivots are described as "support facilities" designed to expedite escort operations and reduce the risk of China's SLOCs "being harassed or blockaded by hostile naval forces."[22] The dual commercial and military purpose of these strategic pivots correspond to the civil-military integration described in China's 2015 Military Strategy.[23] Such ports can serve as important enablers for People's Liberation Army Navy (PLAN) vessels in terms of ship maintenance and oil replenishment, thereby allowing China to increase its reach, presence, and prestige. From India's perspective, these port projects—particularly in Myanmar, Pakistan, and Sri Lanka—appear to confirm the "string of pearls" theory, which argues that China endeavors to establish a string of facilities in the Indian Ocean region that can support the PLAN.[24]

While China seeks to strengthen its position in the Asia-Pacific through the BRI and other means, some of which are aggressive, terms like "collaboration," "shared benefit," and "equal partnership" dominate Chinese government pronouncements. At the 19th Party Congress, Xi argued in favor of those attributes espoused by liberal international relations theorists, such as cooperation, globalization, trade, and international institutions.[25] While these efforts are intended to improve China's influence and image, a look at some of its actions appear to indicate that China often desires shared community and cooperation only to the extent that others are willing to defer to it. As Mohan Malik of the Asia-Pacific Center for Security Studies (APCSS) notes, "China's goal in its foreign relations is not usually conquest or direct control, but freedom of action, economic dominance and diplomatic influence through coercive presence."[26]

China behaves according to what theorists of realism would expect of regional hegemons when its neighbors do not acquiesce on issues such as its claims in the South China Sea. China has used a divide-and-conquer approach to keep certain issues from appearing on multilateral agendas.[27] By its insistence to deal with countries on an individual basis, it is able to use its overwhelming economic power in an effort to bring countries into compliance. According to one scholar, "China is already following the strategies of previous regional hegemons. It is using economic coercion to bend other countries to its will."[28] Examples related to the BRI include Sri Lanka's handover of Hambantota Port in a debt-equity swap and

Cambodia's willingness to serve as China's proxy within the Association of Southeast Asian Nations (ASEAN) in exchange for economic benefits.

Chinese scholar Yan Xuetong agrees, noting that "China will decisively favor those who side with it with economic benefits and even security protections. On the contrary, those who are hostile to China will face much more sustained policies of sanctions and isolation."[29] The use of economic dependency and coercion to advance interests, though, should not be interpreted as complete disregard for the interests of BRI partner countries. For the BRI to be effective, partner countries must also benefit. The level and type of benefits necessary for BRI projects to be deemed worthwhile will vary by partner country as will each country's susceptibility to coercion. Moreover, the willingness of China to lower interest rates on loans and convert loans to grants will also vary by country, depending on how closely projects are linked to China's core security and development interests.

Chinese Financing of BRI

China is advancing its regional and international influence through its financing of BRI projects as well as the establishment of new multilateral institutions. Examples of multilateral and domestic Chinese institutions that are key financers of BRI projects include the China Development Bank, the Export-Import (Exim) Bank of China, China's four leading commercial banks, the AIIB, and the Silk Road Fund. Estimates for Chinese investment under the BRI range from $1 to $8 trillion US dollars, with $1 trillion being the most frequently cited number.[30] To date, South and Southeast Asia have received the majority of BRI investment, which is indicative of the region's importance to China's security and development interests.[31]

Much of the impetus for China's creation of the AIIB developed from dissatisfaction with the governance of existing international financial institutions, particularly an insufficient "focus on infrastructure and growth."[32] There were early fears in the West that China would use the AIIB for its own political and economic ends, including as a means to dispose of excess SOE capacity through BRI projects.[33] While these practices have occurred in relation to BRI projects funded by China's commercial and policy banks, the AIIB, while complementing the BRI, has thus far been a minor player. And although China holds a sufficient percentage (26.6 percent) of the AIIB's shares to effectively veto "decisions requiring a super majority," it has not used that veto power to date.[34]

The AIIB is constrained by its multilateral structure, governance, and operating procedures, mirroring those of other multilateral development banks.[35] Therefore, it could be argued that the AIIB, as one of China's first efforts to establish a major multilateral institution, is primarily a tool to promote a positive image. If so, this would serve as an incentive for China to avoid using its veto power in the AIIB. As the BRI expands into countries more cautious in their engagements with China or having multiple funding options, the AIIB will likely be used more frequently to fund BRI projects.[36]

In contrast to the AIIB, China's policy and commercial banks offer a less constrained option to fund BRI projects, which is particularly important for BRI projects vital to China's security interests. Policy banks, in particular, function as "agents of Chinese state-capitalism that employ subsidized capital to achieve a combination of commercial and geopolitical aims."[37] China created three policy banks in the 1990s, two of which are closely related to the BRI and either directly or indirectly under Chinese government control. The China Development Bank finances infrastructure, energy, and transportation projects.[38] The Exim Bank focuses on trade financing and promotion of Chinese products and services, which are critical to China's SOEs.[39] Based on a 2018 report, the AIIB has only loaned a little more than $3.5 billion to date, and just one-third of that appears to be BRI related. In contrast, the China Development Bank and Exim Bank reported lending approximately $102 billion and allocating "hundreds of billions in BRI-related credit."[40]

Most BRI-related loans share common characteristics. For example, Chinese loans generally come from "state-funded and state-owned policy banks," such as the Exim Bank of China and China Development Bank.[41] The loans typically come in two primary forms—concessional loans and preferential buyer's credit—and generally have higher interest rates than those granted by most multilateral agencies. The terms of Exim Bank loans typically require that the projects be implemented by Chinese companies with at least 50 percent of the equipment, materials, and services sourced from China. Such loans, according to one scholar, are concessional loans made to "less credit worthy countries to promote exports of Chinese goods and services."[42]

The most important observation about the vast majority of early BRI projects is that they are almost entirely financed by banks and funds under Chinese government control. This makes sense given the security interests involved. While the China Development Bank and Exim Bank have combined to provide around 45 percent of BRI funding, China's four largest state-owned commercial banks have provided 51 percent of BRI funding.[43]

The Silk Road Fund, which also funds BRI projects, is linked to the People's Bank of China and has total capital of $40 billion. The four Silk Road Fund shareholders include the State Administration of Foreign Exchange, China Investment Corporation, Exim Bank of China, and China Development Bank.[44] As a result of the lack of expected financial return on many projects, it is reported that some state-run banks would like to avoid more BRI spending. Yet the fact that the BRI is so closely connected to Xi Jinping and is now written directly into the Constitution means that attacking the initiative is seen as an attack against the CCP.[45] Moreover, the inclusion of the BRI in the Constitution may be an effort to consolidate central government control over the initiative, aspects of which Chinese companies, provinces, and even prefectures have taken the lead in implementing.[46]

The BRI in China's Backyard

As the "main axis" of the BRI, South and Southeast Asia are vital to China's interests.[47] Infrastructure in the region is key to the connectivity envisioned by BRI, as evidenced by the fact that the area has experienced the most significant investment for the longest period. However, there has been little financial return on investment, and it is questionable whether China is actually seeking a financial return or simply pursuing "geopolitical needs."[48] The countries that have benefitted most are those that "already had strong geopolitical reasons" to align with China.[49] Incidentally, these countries are among the most likely to allow a Chinese naval base or—even more probable—serve as overseas strategic pivots, providing support for both commercial and naval vessels.[50] Ports serving this purpose would partly address the vulnerability of one of China's most important trade routes.[51]

Within Southeast Asia, Cambodia and Myanmar exemplify China's approach. Both are strategically important because of land transportation routes, ports, and sea-lanes, as well as their ASEAN membership. Ports in Cambodia and Myanmar would give China strategic locations on the eastern and western sides of the Malacca Strait, thereby addressing one aspect of China's Malacca Dilemma, while pipelines in Myanmar enable a supply route that bypasses the Strait. Also, with labor rates much lower than China's, both countries present an opportunity to move some low-end factory production abroad as part of China's "going out" policy. This policy encourages Chinese companies to invest abroad, particularly in the energy sector.[52]

In an analysis of relations between China and the member states of ASEAN, David Shambaugh identifies ASEAN states by one of six categories along a spectrum. Those closest to and most dependent on

China are at one end of the spectrum, while those farthest from and least dependent on China are at the other end. The categories include capitulationist, chafer, aligned accommodationist, tilter, balanced hedger, and outlier. His analysis identifies Cambodia as a "capitulationist" state, meaning it is the most closely tied to and dependent on China and has a "virtual client-state relationship." Categorized as a "chafer," Myanmar is the second most closely tied to China and has no other options.[53] At the other end of the spectrum is Indonesia, described as an "outlier" that "goes out of its way to maintain distance" from China and the United States. As Shambaugh notes, this spectrum is not static; the status of states within ASEAN can change over time.[54]

Located along the Malacca Strait, Malaysia's Melaka Gateway project also figures in China's plans to strengthen its position in the region and reduce the vulnerability of the strait. However, this discussion does not pursue China's BRI investments in Malaysia and other ASEAN countries. Instead, it specifically examines two ASEAN states identified as capitulationist and chafer states, as well as two South Asian nations that appear to meet the description of either a capitulationist or chafer state. Shambaugh identifies Malaysia as an "aligned accommodationist" state, which is less closely aligned to China than capitulationist and chafer states.[55]

South Asian countries are also critical to the BRI and China's broader interests. Among the most important are Pakistan and Sri Lanka. Based on Shambaugh's spectrum of dependency, Pakistan and Sri Lanka appear to have teetered between capitulationist and chafer states in recent years. Pakistan, like Myanmar, offers China the ability to use pipelines to improve energy security by affording an alternative to traversing the Malacca Strait. Ports already constructed or currently under construction in Pakistan and Sri Lanka also improve China's ability to protect SLOCs, to increase its visible presence in the region, and to gain prestige. For example, Gwadar Port in Pakistan will provide China a port on the Arabian Sea near the Strait of Hormuz, while ports in Sri Lanka serve as important assets on the Indian Ocean.

Cambodia

Cambodia has become one of the fastest growing economies in the world due to billions of dollars in Chinese investments.[56] Cambodian president Hun Sen is now seen as China's proxy in ASEAN. In 2016 he blocked ASEAN from condemning China for its territorial claims in the South China Sea.[57] According to Dr. Sophal Ear, a leading Cambodia expert, the Cambodian government "is willing to do just about anything

at this point to satisfy China."[58] He says that some so-called BRI projects are merely mechanisms to put money in the hands of government officials to buy influence.[59] During a speech at the University of Colorado, Boulder, Dr. Ear indicated that Cambodia is "increasingly looking like a province of China, if not a wholly-owned subsidiary."[60]

As of early 2017, Chinese companies were reportedly responsible for 70 percent of industrial investment in Cambodia, held at least 369,000 hectares of land concessions, and had development rights for around 20 percent of Cambodia's coastline.[61] The Koh Kong Port in Koh Kong Province is an example of a significant Chinese infrastructure investment. It is part of a pilot zone on a 45,000-hectare concession that was provided to a Chinese company for 99 years with a 100 percent equity stake.[62] The Cambodia Union Development Group originally signed the deal for the pilot zone. A review of Cambodia's corporate registry revealed that ownership was changed from foreign to Cambodian before the concession was awarded, reportedly as a cover for Chinese company Tianjin Union Development Group to circumvent Cambodia's law limiting the size of foreign land concessions.[63] Phase 1 of the Koh Kong Port project is currently underway, while two man-made lakes, a power plant, four-lane highway, resort, and golf course are already completed.[64] A recent report notes that a Chinese naval base in Koh Kong would position China to "challenge military vessels coming through the South China Sea from two directions, instead of only from the Spratly Islands."[65] Additionally, a base in Cambodia would extend China's military presence beyond the nine-dash line and position China on the doorstep of a potential canal across Thailand—a long-proposed project that has recently gained new attention—which would shorten China's path to the Indian Ocean.[66]

The Koh Kong Port and pilot zone project appears to follow the "port-park-city" (前港-中区-后城) model, involving development of a port followed by construction of an industrial park, which some argue is "then intended to lead to the establishment of a proxy Chinese city inside another sovereign state."[67] Those with an optimistic assessment note that parks with special economic or free trade zones lead to increased trade and investment, which can serve as a means to recuperate infrastructure development costs.[68] However, potential dangers include the loss of sovereignty due to long-term leases, the exclusion of the host nation and other countries from projects, and interference in a state's domestic politics.[69] While Hun Sen insists that Cambodia will not allow a foreign military base, recent reports indicate that China's Union Development Group is nearing completion of a runway in Koh Kong Province that

matches the length of runways China built on islands in the South China Sea to support "military reconnaissance, fighter, and bomber aircraft." The same report reminds us that China denied that it would militarize those islands, which now host "anti-ship cruise missiles, surface-to-air missiles, and military jamming equipment."[70]

Myanmar

Unlike Cambodia, Myanmar not only borders China but also serves as an important link between South and Southeast Asia. During the 1990s, Myanmar's military junta relied heavily on China for economic survival. In return, China gained access to natural resources and "moved closer to gaining a strategic passage from southwest China to the Bay of Bengal."[71] Although there have been complaints about Chinese economic domination and illegal immigration from China that led the government to suspend several Chinese projects, Myanmar remains heavily reliant on China. After Myanmar's return to democracy, the country reopened some previously suspended Chinese projects and approved others. The Myanmar government earns billions from Chinese-owned pipelines that provide oil and gas to China's Yunnan Province. This scenario is just one example of how China uses infrastructure investments in Southeast Asia to improve its energy security by developing supply route alternatives to the Malacca Strait.[72]

In 2015 Myanmar approved "plans to develop a deep-sea port, industrial zone, logistics hub and other facilities in Kyaukpyu—all by Chinese companies."[73] Due to increasing concerns of unsustainable debt, Myanmar renegotiated the project in 2018. Doing so led to an agreement to scale the project back from its original $7.2 billion to $1.3 billion, thus better serving Myanmar's interests and also allowing China to complete a core element of its BRI plans. Myanmar will further expand the port only if usage and profits permit.[74] China's CITIC Group will take a 70 percent stake in the project while the rest will belong to the Myanmar government and several domestic companies. The CITIC Group is also investing $2.7 billion to develop an industrial park within the special zone, for which it will receive a 51 percent stake.[75]

It is unclear whether China will apply the port-park-city model in Myanmar, which has grown increasingly concerned about its excessive dependence on that country. Dr. Malik, however, suggests that China will pursue this model of development in Myanmar and Cambodia just as it is doing in Pakistan and Sri Lanka.[76] He notes that China has threatened Myanmar with an economic penalty of one billion US dollars for backing out of the Myitsone Dam project in an effort to restart the project. He

adds that China's veto in the United Nations Security Council gives Myanmar diplomatic protection in relation to the Rohingya refugee issue, which is used to "make sure Myanmar does not move out of China's orbit."[77]

Pakistan

The China-Pakistan Economic Corridor (CPEC) is a key route linking China to other countries as well as to the strategically important Gwadar seaport. CPEC is BRI's flagship project.[78] The Karot Hydropower Station, a major initial element of CPEC, was the first project funded by the Silk Road Fund.[79] Valued at $62 billion overall, CPEC involves "expanding Gwadar port, and constructing energy pipelines, power plants, hundreds of miles of highways and high-speed railways, fiber-optic cables and special economic zones."[80] Gwadar Port is considered one of China's overseas strategic pivots, intended to "facilitate China's civilian and military sea-borne activities" in the region.[81]

CPEC is valuable not only to China's security but also to the economic health of northwest China. Unlike BRI projects further afield, CPEC "has the potential to transform the economy of its [China's] underdeveloped, remote and restive Xinjiang province."[82] Reducing separatist sentiments in Xinjiang is a priority that China hopes CPEC can help achieve through economic development. Among other benefits, CPEC will provide Xinjiang with access to the sea. Moreover, Gwadar Port and the Gwadar-Kashgar gas pipeline that will link the Bay of Bengal to Yunnan Province in China through Myanmar are key aspects of CPEC that can help China overcome its Malacca Dilemma.[83]

While Pakistan is among the most significant BRI countries in terms of investment, and one of the biggest supporters of the BRI, concerns about unsustainable debt have led the Pakistani government to revisit some aspects of the CPEC project. Dependence on Chinese loans to "prop up its vulnerable economy," however, has made those efforts tricky.[84] One option Pakistan raised was a build-operate-transfer model, which Chinese officials indicated they would be willing to entertain.[85] For a rail component of the CPEC project, Pakistan sought funding from the Asian Development Bank. However, China indicated that the project was "too sensitive," and Islamabad reportedly "kicked out the bank under pressure from Beijing in 2017."[86] In late 2017, the Pakistani government pulled out of a $14 billion deal with China to build the Diamer-Bhasha Dam because it could not accept the "hyper strict" funding conditions: China would take ownership of the project as well as operations and maintenance. The project will reportedly move forward with Pakistani funding.[87]

Gwadar Port is an important element of CPEC. It is a Chinese-funded and constructed project that affords China access to a port at the mouth of the Persian Gulf near the Strait of Hormuz.[88] Pakistan provided China a 43-year lease for hundreds of hectares of land at the Gwadar Port for the construction of a special economic zone. Additionally, the port itself was leased to the China Overseas Port Holding Company for a period of 40 years, along with a "91 percent share of revenue collection from gross revenue of terminal and marine operations and 85 percent share from gross revenue of free zone operation."[89] Although Chinese financial institutions have reduced the interest rates on some loans and converted the $230 million loan for Gwadar Airport from a loan to a grant, concerns remain that Pakistan's dependency on China has resulted in agreements that favor China at the expense of Pakistan.[90]

China appears to be pursuing a port-park-city model of development in Gwadar similar to that planned in Cambodia. Although it may be an overstatement, one recent report claims that China plans to settle a large number of Chinese professionals in the port city by 2022.[91] Reports often stoke fears of Chinese "takeovers," and Chinese companies often exaggerate the scale of projects. Whether such development models will be fully realized remains to be seen. Still, China seeks to attract Chinese businesses to newly created free trade zones as part of its policy of encouraging foreign investment, and private Chinese citizens often seek opportunities near large-scale BRI projects.

Sri Lanka

Indebtedness and international criticism of the Sri Lankan government for failing to seek reconciliation during and following its civil war were factors leading to an overreliance on China for development assistance. During Mahinda Rajapaksa's government, Sri Lanka sought to rapidly improve economic development prospects. In 2006 a Chinese state-run company received loans from China's Exim Bank to construct a $1.35 billion coal power plant in Puttalam, Sri Lanka. Exim also loaned millions to Sri Lanka in 2008 to build the Hambantota Port in the south of the country. Following the war, the country increasingly relied on Chinese loans to jump-start its postconflict reconstruction efforts.[92]

As of 2015, Sri Lanka had accumulated billions of dollars in debt to China. The 2015 election led to Rajapaksa's fall and the election of Ranil Wickremesinghe. The new government faced a high debt-to-GDP ratio, reaching 79 percent in 2016.[93] As a result of an inability to pay debts, Sri Lanka arranged a debt-equity swap giving China Merchants Port Holding

a 99-year lease of the Hambantota Port and an 80 percent stake, as well as 15,000 acres of land around the port to be developed as an industrial zone for Chinese investors.[94] This agreement allowed China to secure an important port on the Indian Ocean for the next century, hearkening back to the 99-year leases that colonial powers unfairly forced on China more than a century ago.

Additionally, the Sri Lankan government allowed China Harbour Engineering Company to resume work on the $1.4 billion Colombo Port City project in 2016, providing China Communications Construction Company a 99-year lease on two-thirds of the 269-hectare land reclamation project.[95] Indian concerns resulted in the cancellation of the provision of land to the company in perpetuity.[96] As part of the renegotiation with the new Sri Lankan administration, the Colombo Port City project was renamed Colombo International Financial City. The core of the project remains intact, though with the added focus on building a financial center and bringing in additional investors.[97] According to Dr. Malik, Beijing "acts in a piecemeal, quiet and patient fashion, only bringing the pieces together 'when the conditions are ripe.' "[98] In the case of Sri Lanka, he notes that China took advantage of the Sri Lankan civil war of the 2000s to establish a foothold in the country.[99]

BRI Trends Going Forward and China's Image

While China has pressured BRI countries to avoid non-Chinese funding sources when projects were regarded as sensitive, China will need to transition to a less mercantilist approach for the BRI to be successful in the long term. China may work to reduce escalating competition by co-opting major multinational companies when and where advantageous. A recent report on future BRI opportunities notes that many multinational corporations expect to increase their work in relation to BRI projects in coming years.[100] Increased engagement by multinational companies and multilateral institutions is most likely to occur in countries less strategically important to China's security.

Though not yet operationally significant to the BRI, the AIIB appears to be an effort to promote China as a responsible international actor. The ability of the AIIB to fund future projects will depend partly on the success of the BRI's overall image and the confidence of AIIB stakeholder nations to provide funds. At the Second Belt and Road Forum, held in April 2019, Xi sought to answer criticisms of the BRI by vowing "zero tolerance" for corruption, pledging increased transparency and environmentally sound practices, and reiterating China's willingness to "open

up."[101] AIIB funding of projects could reduce criticism by eliminating direct Chinese control over projects. Yet if AIIB stakeholders withhold funding or lack confidence in the institution, it could become "nothing more than a shell organization through which China disburses bilateral foreign aid."[102]

As the BRI moves forward, China will continue to be denounced for certain projects, particularly those funded by Chinese banks with high interest loans; built with mostly Chinese labor, equipment, and materials; and owned and operated by Chinese companies as a requirement of the investment agreements. China will likely lower interest rates or forgive some loans, as it has already done for select projects, to avert growing reprobation and advance projects. In addition, some announced projects will fail to develop or will be halted, though China will go to great lengths to maintain BRI projects related to its security.

Conclusion

This article has argued that China's implementation of the BRI in South and Southeast Asia is a strategic effort to achieve predominance in the Asia-Pacific. China's increased presence and influence in the region, access to and creation of new ports, and strategic moves to overcome its Malacca Dilemma are all important steps toward achievement of this objective. China's preferred means of securing predominance is not direct confrontation, but to improve its posture by bringing countries into its orbit while gradually expanding its influence and ability to project power economically, diplomatically, and militarily. The most likely nations to host future Chinese overseas strategic pivots or naval bases, and/or serve as China's proxies in multilateral institutions, are those that display characteristics of what Shambaugh labels capitulationist and chafer states. In Southeast Asia, this category includes Cambodia and Myanmar. Extending this framework to South Asia, Pakistan, and Sri Lanka is also clearly in China's orbit. China has used the BRI in Myanmar and Pakistan to link itself with the Indian Ocean via overland routes while improving its energy security through the development of pipelines forging an alternative to shipments via the Malacca Strait and the South China Sea. In all four countries profiled here, China has advanced its economic and diplomatic influence while gaining long-term access to important ports that could serve both commercial and military purposes.

While Chinese investments can benefit BRI partners in the Asia-Pacific and elsewhere, excessive dependency leaves countries vulnerable. Therefore, BRI countries should seek to diversify project funding and

avoid agreements that could result in the loss of sovereignty over key infrastructure. Chinese leaders will tailor the BRI to ensure successes, though sometimes measured in terms of security benefits rather than financial returns on investment. BRI partner countries should seek opportunities to take advantage of this "tailoring," which could offer the potential for more favorable agreements or modifications to existing agreements—particularly if China is receiving significant negative international attention due to exploitative practices. China has demonstrated a willingness to use economic and diplomatic coercion to keep some countries firmly in its orbit. Thus far, however, it appears more likely to use economic benefits to get its way with BRI partner countries in the region, especially those viewed as vital to China's security interests. While some of China's plans for the BRI will fail, the overall initiative is, as Dr. Malik observes, "too big to fail completely."[103]

Chinese leaders will continue efforts to improve the image of the BRI, as Xi Jinping recently did at the Second Belt and Road Forum when he noted that cooperation "will be open, green and clean."[104] Over time, the AIIB is likely to serve an increasingly important role, and China could use it as a means to improve the image of BRI generally. Moreover, financial returns on investment will likely become more essential for projects that do not represent core security interests and those funded in less vulnerable countries. Therefore, once China has improved its position in the Asia-Pacific and secured critical resources, it is likely there will be a gradual transition to less mercantilist approaches and a shift away from Chinese commercial and policy banks as the primary lenders.

The United States must develop a long-term strategy to compete and cooperate with China in the Asia-Pacific. In doing so, US leaders would be prudent to regard China's rising status as a reality to be wisely managed in coordination with allies, partners, and international institutions rather than as a problem to be solved. The United States should seek to maintain its status as the leading military power in the region for the foreseeable future. Moreover, it is important that the United States remain the security guarantor for treaty allies in the region as well as protect international sea-lanes vital to global trade. The definition of US success in the region must also include an increased recognition of and respect for China's growing status, along with efforts to cooperate on issues of mutual interest.

The United States and its allies should coordinate based on their relative strengths and position themselves as potential partners with countries in the region. However, the United States should not overextend itself by attempting to directly compete with Chinese infrastructure loans but,

instead, support projects that build indigenous capacities. Additionally, the United States should work with multilateral organizations and partners in the region to publicly identify BRI projects failing to meet international standards regarding transparency and accountability, as well as those agreements resulting in loss of host-nation sovereignty over key infrastructure and territory. Another US priority in the region must be increased diplomatic and military-to-military cooperation, which can be demonstrated by consistent and high-level engagement with ASEAN and individual South and Southeast Asian nations.

While originally opposed to its creation, the United States should consider AIIB membership. Joining the AIIB would give the United States a voice in AIIB decisions while also signifying a willingness to engage and cooperate with China on responsible initiatives, thereby sending an important message to the region. Similarly, the United States must revisit participation in the Trans-Pacific Partnership (TPP) trade agreement. The agreement includes labor and environmental standards that are beyond China's reach in the near future. As a result, US participation in the TPP would help to maintain as well as to advance US leadership in the region.

Finally, the United States and its partners should remain cognizant that China's competition for predominance in the Asia-Pacific involves not only its influence on countries in the region but also those in other regions. As the BRI expands, China will continue to use the initiative as a tool to bring countries into alignment with Chinese positions within multilateral institutions, such as ASEAN and the UN. Future disputes between China and the United States in an ever-more-contested Asia-Pacific region will almost certainly be influenced by the votes of ASEAN and UN members. Therefore, effective engagement with multilateral institutions and their member states throughout the world will be an increasingly important element of the United States' ability to compete with China in the Asia Pacific. **SSQ**

Notes

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A New Defense Strategy Requires a New Round of BRAC

FREDERICO BARTELS

Abstract

When the United States releases a new National Defense Strategy (NDS), it outlines the capabilities that the country will need to face the existing and forseeable threats to national defense. Left unsaid is that this force structure must be housed and trained in the current physical infrastructure owned by the Department of Defense (DOD), regardless of the adequacy of the infrastructure to the future force structure. This adequacy is only properly addressed through the studies performed in the initial stages of a round of base realignment and closure (BRAC). The connection between forces and infrastructure is highlighted in the 2005 BRAC Commission's report recommending a new round of BRAC whenever there is a defense review. The 2018 NDS also calls for a new round of BRAC. Congress should recognize the inherent importance of assessing the defense infrastructure when the force structure or strategy changes and link the authorization of a new round of BRAC to the release of a new defense strategy. The two efforts are complementary.

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The last time the Department of Defense (DOD) conducted a round of base realignment and closure (BRAC), George W. Bush was starting his second term in office and Nokia still reigned supreme in the cell phone market. Since 2005 the military has experienced substantive changes in how it operates and defends the nation, from the ubiquity of smartphones to the use of remotely piloted aircraft. Amid these changes, the department has been unable to substantially reshape its infrastructure footprint. Despite former Secretary of Defense James Mattis calling BRAC "one of the most successful and significant"[1] of the DOD's efficiency measures, multiple internal studies showing excess capacity,[2] and repeated requests from the DOD, Congress has not authorized a new round of BRAC.[3]

The current National Defense Strategy (NDS) released in January 2018 marks a shift in focus for the military from counterterrorism to great

power competition.[4] This change will necessarily precipitate a rethinking of force structure—with implications for how and where troops are located and the infrastructure needed. The BRAC process enables the Defense Department to holistically assess the adequacy of its current infrastructure for the planned force structure. By looking across state lines and military services, BRAC aims to enhance the military value of installations. The connection between a defense strategy and the department's infrastructure was explicitly made by the Defense Base Closure and Realignment Commission in 2005, when it recommended new rounds of BRAC whenever defense reviews are released.[5] The connection is further reinforced by the 2018 NDS, calling explicitly for reductions in excess infrastructure through a new round of BRAC and promises that the DOD will present options to Congress on how to reduce excess infrastructure.[6]

Each new strategy seeks to build a comprehensive understanding of what the military should be capable of executing and outlines the force structure needed for the future, which are major components of the definition of "military value" used by a BRAC process. Each new strategy will have different priorities and thus value differently the myriad military capacities and infrastructure to support each capacity. Absent a BRAC round, this force structure must be housed in the infrastructure the military currently owns. If any new strategy is to mold the military's understanding of its capabilities, it will be incomplete without a chance to change how the military is dispersed and located. A new round of BRAC is the best instrument available to ensure alignment of the military infrastructure with the force structure required by the current and future strategy. Only a BRAC round would enable the Defense Department to ensure its installations are optimized for great power competition—the intent of the current NDS—while reducing unnecessary infrastructure and freeing resources for higher-priority investments. Great power competition requires a force shaped differently than one focused on fighting terrorism. It might require enhancing forward presence, leveraging our allies, or increasing the Pacific orientation of our force. These are issues the BRAC process is well-suited to explore.

Moreover, any NDS marginally changes the definition of military value—the driving concept of BRAC rounds—giving more weight to the recommendation of the 2005 BRAC Commission to tie these events together. Thus, infrastructure value assessments should be a part of the implementation process for every new NDS. Doing so would give Congress and the nation two imperatives for a new round of BRAC: (1) aligning the infrastructure's military value to the NDS's understanding of value in the

context of great power competition and (2) generating savings in fixed costs by reducing documented excess infrastructure.

This article highlights the unique value of the BRAC process and how its defining characteristics make it work within the political process. It also reviews how the experience of the 2005 BRAC Commission can and should shape future rounds of base closures. Finally, it suggests considerations for how to think about future rounds and recommends possible changes in how Congress determines base closures in the context of a BRAC round.

Unique Value and Defining Characteristics of BRAC

By law, if the secretary of defense wants to close an installation with more than 300 civilian positions or more than 1,000 uniformed personnel, the DOD must follow a lengthy process.[7] It must notify both Armed Services Committees during the annual appropriations process. In the written notification, it must submit an evaluation of the criteria used to determine the closure and the impacts such closure will have. Then, the department must wait either 30 legislative or 60 calendar days from the time of the notice before taking any action. This process effectively provides enough opportunities for political forces to enact barriers, so the de facto result has been that the DOD does not even try anymore. Over time, BRAC has proved to be the only tool available to the DOD that stands any chance of making large-scale changes to its infrastructure. It empowers the DOD to have multiple actions in one package and changes the transaction costs for both the executive and legislative powers.

The process of base realignment and closure was designed to change the decision-making process and rationalize the closure and realignment of domestic military bases. With major reductions in the size of the armed forces in the latter twentieth century, the executive branch needed to reduce military infrastructure. It initially interpreted the ability to close bases as a presidential prerogative under his power as commander in chief, as explained by George Schlossberg, the general counsel to the Association of Defense Communities.[8] Schlossberg further describes that "the massive dislocations caused by the McNamara closures, and rising congressional concerns that base closures were being used to reward friends and punish political enemies, especially during the Vietnam drawdown, led to increased congressional interest and legislative activity."[9] This congressional interest and activity led to severe reductions in the pace of any closures by imposing legal requirements on each of them, effectively halting the process.[10] The end of the Cold War and further reductions in

the end strength of the armed forces increased the pressure for future base closures, and the foundations for the current BRAC process were laid out in the Defense Base Realignment and Closure Act of 1990.[11]

The main innovation of BRAC is to allow lawmakers to express their parochial concerns in a way that still enables the Department of Defense to close and realign bases. To achieve this effect, the process removes the selection of bases to be closed or realigned from both the executive and legislative branches and vests an independent commission with authority based on criteria defined by Congress, chiefly among them military value.[12] For the 2005 round, military value criteria were defined mainly in terms of assuring current and future mission capabilities.[13] The process ensures that lawmakers shape the selection but individually are unable to completely stop it. The objective criteria determined by Congress is an elegant solution for the legislature to maintain its influence while insulating it from the actual decision-making.

The ability to reduce the entry points for political interference coupled with trust deposited in the work of the commission gives the process robustness. In a further effort to build political buy-in, there are four off-ramps that can terminate a round of BRAC once it starts.[14] The first off-ramp is if the DOD's assessment of its infrastructure and force structure analysis is not certified by the Government Accountability Office (GAO). The second off-ramp is if Congress fails to nominate commissioners. The third off-ramp is that the work also terminates if the commission fails to transmit a list of recommendations in due time. Finally, at the end of the BRAC Commission's work, Congress can still disapprove the list of recommended closures and realignments. This creates yet another avenue to stop the process. These off-ramps undoubtedly raise the level of confidence that both the executive and the legislative branches will operate in good faith during the process. After all, if there is any mistrust, the round can be stopped by the above parties at various points. In previous rounds, these off-ramps have never been taken.

So far, the DOD has conducted five rounds of BRAC. A typical round takes between eight and ten years, including the time that the Department of Defense has to implement the congressionally approved actions, and reduces around 5 percent of the infrastructure.[15] In the current law, the department has six years to act on the approved list. Most of the public attention in a BRAC round falls within a critical 18-to-24 month period when an independent commission is formed and reviews the recommendations provided by the Department of Defense.

Current law lists eight steps for conducting BRAC.[16] However, Congress could change these steps when members write the authorization for a new round. It is also in the authorizing legislation where Congress outlines the selection criteria that the department will use to evaluate its infrastructure. The DOD publishes these criteria for public comment in the *Federal Register*. In the 2005 round, there were eight criteria—four of them based on military value followed by four based on other considerations (fig. 1). The selection criteria are among the main elements lawmakers can and should influence when authorizing a new round of BRAC.

MILITARY VALUE [LISTED IN ORDER OF IMPORTANCE]

1. The current and future mission capabilities and the impact on operational readiness of the total force of the Department of Defense, including the impact on joint warfighting, training, and readiness.

2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.

3. The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.

4. The cost of operations and the manpower implications.

OTHER CONSIDERATIONS

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.

6. The economic impact on existing communities in the vicinity of military installations.

7. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel.

8. The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance.

Figure 1. Selection criteria for 2005 BRAC. (Reproduced from Defense Base Closure and Realignment Commission, *2005 Defense Base Closure and Realignment Commission Report* [Washington, DC: Government Printing Office, 8 September 2005], "Executive Summary," v, https://permanent.access.gpo.gov/lps112577/www.brac .gov/docs/final/BRACReportcomplete.pdf.)

When the criteria are finalized, the Department of Defense is responsible for developing a force structure plan and an associated infrastructure assessment. This plan is developed through a broad data call to all installations through all the services and departments. It requires an extraordinary level of detail and resources and thus occurs only when the department has both the authorization and funds to conduct a round of BRAC.

The force structure and infrastructure plan is then certified by the Secretary of Defense and evaluated for consistency by the GAO. Based on the

certified and evaluated plan, the department then proceeds to develop a recommended list of bases that could be closed or realigned. This list is evaluated by an independent commission, which has limited time to evaluate and change the list before submitting it for the presidential approval. The role of the commission is to act as a neutral arbiter to ensure that the department is following the proper criteria and the communities and lawmakers have a voice in the assessment without unnecessarily delaying the process.

Once the commissioners have reviewed the recommendations, they issue a report on their findings and recommendations to the president. The president has the option to reject the list and ask the commission to re-examine the issues that led to the rejection. Once the president approves the list, the commission transmits the list to Congress. From the moment of transmission, Congress has 45 days to disapprove the list as a whole or it becomes binding. The requirement of explicit disagreement with the entire list has been a key attribute for previous BRAC processes.[17] Once the list is approved, the Department of Defense can begin implementation.

Through this process, the independent commission also removes the burden and responsibility for decision-making about individual installations from elected officials and better balances the goal of having a rational defense infrastructure with the political survival imperative faced by every lawmaker. Doing so is a necessity since base closures can get support in the abstract but not from the affected constituency. As soon as specific installations are named, local lawmakers will likely rise in opposition. The establishment of the independent commission weakens the localized opposition from lawmakers; they are required to vote on only the complete package of closures and realignments instead of individual installations.

Despite well-documented success stories of recent installation transitions, such as the transformation of Bergstrom Air Force Base, Texas, into the Austin-Bergstrom International Airport, lawmakers with bases in their district are unlikely to support the case for a new round of BRAC.[18] The impulse for lawmakers is still to preserve the status quo, but the context of a round of BRAC allows them to express that sentiment without completely derailing the process.

This type of expected opposition to specific plans of closures and realignment makes the independent commission an essential element of the success previously experienced by BRAC rounds. Therefore, proposals such as the one floated in the summer of 2017, to remove the commission from the process, should be rejected by both Congress and the executive branch.[19] Senators John McCain (R-AZ) and Jack Reed (D-RI), then,

respectively, chairman and ranking member of the Senate Armed Services Committee, floated this proposal for a BRAC without an independent commission.[20] Their proposal would have designated the GAO as the arbiter that would validate the DOD's analysis before it goes to Congress. The late Senator McCain wanted to make Congress more responsible for the decisions on base realignments and closures.[21] Nonetheless, removing the independent commission would largely replicate the conditions that led to the need for BRAC legislation in the first place. Experience and political science have shown the importance of maintaining the independent commission to overcoming the expected political hurdles of any BRAC round.

BRAC is a holistic process that looks at all bases—not just the ones estimated to have excess capacity—through factors defined by its authorizing legislation.[22] To compile the required data to assess every installation fairly, based on set criteria, the DOD spends considerable time collecting information from the military departments on the usage of its installations and verifying that the data is uniform across components. It is a level of effort that does not occur on a regular basis and is reserved for BRAC rounds. Thus, each round is a uniquely valuable moment to assess the military infrastructure. The data-collection phase is extremely productive in and of itself since it is both extraordinary and expansive. Its comprehensive character makes it useful to develop a better understanding of how the infrastructure is being used and what type of occupancy exists.

Moreover, it is always important to stress that, as of now, Congress must authorize each new round of BRAC. In turn, Congress has the prerogative to determine many elements that shape and define a BRAC round. These might include setting goals for infrastructure reduction, determining the criteria that will be used to evaluate bases, or establishing the length of time that the department will have to implement changes.[23]

BRAC and the National Defense Strategy

The last Commission on Base Realignment and Closure proposed legislative changes in its final report on 8 September 2005.[24] The commission evaluated the challenges it faced in executing a round of BRAC, some of which are discussed in the recommendations section of this article. Current law makes it so difficult to realign infrastructure that, in essence, it forces all actions to take place in the context of a future BRAC round, when the studies and notifications can be done en masse through a BRAC Commission report. Absent any changes in the law giving the Department of Defense further autonomy over base closures and realignment,

there will be a growing number of real estate actions that will accumulate until the next round of BRAC.

Reflecting the accumulation of real property actions and because of the lengthy 10-year gap between the 1995 and the 2005 BRAC, the 2005 commission suggested that BRAC rounds occur at periodic intervals. The 2005 BRAC Commission's recommendation to tie a new round of closures and realignments to a new strategy was based on the relevance of infrastructure changes in shaping the future of the force. The Quadrennial Defense Review (QDR) was released 6 February 2006, just five months after the BRAC report.[25] This timeline meant that the Department of Defense was working on both reports at the same time, indicating that one process should influence the other. However, according to Anthony Principi, commissioner of the 2005 BRAC, some force basing decisions made through the QDR that adversely affected BRAC recommendations became apparent only after the BRAC recommendations list was done. One example is units that were moved because of the QDR were to be moved through the BRAC as well.[26]

In the commissioner's own words, "In fact, initiating a new BRAC round should be considered by the Secretary of Defense in eight-year intervals following every alternate QDR."[27] The Quadrennial Defense Review has since been replaced with the National Defense Strategy, but the argument persists: a new strategy or review of the DOD's mission and forces should be accompanied by a review of its infrastructure—a BRAC round.[28]

Documents like the QDR and now the NDS set the general direction of the military and seek to describe a force structure adequate to face the challenges outlined by the document and alters the understanding of military value. The current National Defense Strategy presents a reorientation to great power competition, with substantial implications for the future force structure—from the size of each service to the location of bases. If lawmakers follow the suggestion of the 2005 commissioners and marry each new strategy with a new round of BRAC, they would enable the department to evaluate its infrastructure in light of the changing strategic direction. It is a step analogous to reassessing your housing needs when you have a child. It is unlikely you will change your residency every time your family grows, but there will be a time when that growth is only possible if you change your house as well. Making this change impossible benefits no one. Especially for the Department of Defense, preventing a new round of BRAC when there is a new strategy forces it to operate within the constraints of its current infrastructure—optimized for a concept of military value attached to an outdated defense strategy.

Tucked near the end of the unclassified version of the 2018 NDS is a promise to work with Congress to reduce excess property and infrastructure through BRACs. It states, "The Department will also work to reduce excess property and infrastructure, providing Congress with options for a Base Realignment and Closure."[29] Curiously, since the release of the NDS, the department has not requested authorization for a new round of BRAC—a feature of every budget request in the previous six years. Nonetheless, a change in strategy should precipitate an assessment of adequacy of the infrastructure for the new objectives. A new round of BRAC now would enable the DOD to simultaneously generate savings and align the current infrastructure to the capabilities necessary to execute the National Defense Strategy.

The location of the forces has enormous effects on how they operate, such as how far service members would need to travel for training to the types of people willing to live where the base is situated. It is not far-fetched to imagine that the types of people drawn to Wright-Patterson Air Force Base in Dayton, Ohio, differ substantially from those drawn to Fort Leonard Wood in Missouri. This same rationale prompted the Army to locate its Futures Command in Austin, Texas, and the DOD to locate the Defense Innovation Unit offices in Silicon Valley, Boston, and Austin. Additionally, the BRAC process allows the DOD to view its military bases in the context of the joint force versus just the service branch controlling a particular base. In this regard, if an Air Force mission would be better suited to be co-located on an Army base, this transition would be immensely easier to execute during a round of BRAC. The location of the organization fundamentally influences its ability to accomplish the mission, and generating new capabilities necessary to engage in great power competition will be made easier with the ability to co-locate missions and units.

As part of the assessment informed by the NDS, the Defense Department must have the ability to rebalance its infrastructure, emphasize and de-emphasize the missions housed in each base, move missions to locations better suited for the mission, co-locate services, and verify if the current physical laydown of units optimally supports the strategy. This type of assessment is normally performed in the early stages of a round of BRAC when the department is collecting base usage data from all the services.

The current NDS is a comprehensive document that should mold and influence the whole department, including its infrastructure. The DOD infrastructure plays a key role in getting the forces ready for great power competition, as outlined by the current strategy. Additionally, there is a clear link between a new round of BRAC and reforming how the Department

of Defense conducts its business—the third line of effort in the strategy: "reforming the Department's business practices for greater performance and affordability."[30] This call for efficiency and business reform in the defense strategy can also be interpreted as an implicit endorsement of BRAC.

Failing to look at the DOD's infrastructure would be an enormous missed opportunity in finding potential efficiencies, an additional benefit of matching infrastructure to strategy. The DOD infrastructure encompasses an area roughly equivalent to the Commonwealth of Virginia and is one of the major fixed costs incurred by the department.[31] Furthermore, the NDS states that it is the goal of the DOD to "deliver performance at the speed of relevance" and in that quest intends to "shed outdated management practices and structures while integrating insights from business innovation."[32] This mentality must be applied to Pentagon-controlled real estate as well, especially when there is literally excess structure that is unneeded. BRAC is the best tool available to the Department of Defense to shape and evaluate its infrastructure enterprise to achieve greater performance and affordability.

A BRAC round serves as an invaluable opportunity for the department to return to the drawing board and examine how all its infrastructure is being used and how it will be used in the future by an envisioned force structure for the purposes outlined by the NDS. It allows military planners to leverage specific criteria to evaluate the adequacy of their current infrastructure plans. The DOD does not currently conduct this type of comprehensive assessment on a regular basis. Thus, the mere preparation for a BRAC round forces the military departments to establish better lines of communication and data both internally and externally, contributing to the breakdown of stovepipes.[33] The BRAC process is not just an exercise in locating and creating efficiencies. It also forces an evaluation that goes back to the basic principles and reasons as to why a military installation exists—to create military value to the nation.

BRAC Infrastructure Assessments

The DOD's 2004 infrastructure capacity report submitted for the 2005 BRAC round shows an excess capacity of 24 percent.[34] The Department of Defense released an infrastructure capacity study in March 2016 that assessed the adequacy of the infrastructure to host the 2019 force structure. The study estimated that the department has 22 percent excess capacity using the 1989 baseline of force distribution. Congress was dissatisfied with the study and, anticipating force growth, asked the DOD to use a substantially larger force structure than previously used.[35] The result was an updated

study released in October 2017, still finding that the department had substantial excess infrastructure.[36] This time the excess capacity was 19 percent, slightly lower, but still significant. Both of these studies are analogous to the force structure and infrastructure assessment developed during a round of BRAC, albeit substantially less detailed.

The size of the force structure used to determine infrastructure adequacy is the main difference between the March 2016 and October 2017 infrastructure capacity studies.[37] The 3 percent variance between the two studies is attributed to the different force structure baselines. The main concern prompting a second study was that the first used the projected force structure for 2019 proposed by the president's budget request for fiscal year 2016, which many critics considered too small.[38] The October 2017 infrastructure capacity study used the considerably larger 2012 force structure as the baseline for its assessment.

Despite the existence of multiple studies, Congress mandated yet another one in the 2019 National Defense Authorization Act (NDAA).[39] The new study is to accompany the president's budget request for FY 2021 in early February 2020. Like the previous two studies, it will assess the adequacy of the infrastructure for the force structure. As with the 2016 and 2017 studies, the major difference will be the force structure size used for analysis. This new study is required to consider the force structure authorized in the NDAA for FY 2018, a departure from previous infrastructure capacity studies.

The other major departure requested in the 2019 NDAA language is the level of detail in its infrastructure assessment. Both previous studies stopped their analysis at the level of the military department, assessing the levels of excess capacity at the Departments of the Army, Navy, and Air Force and at the Defense Logistics Agency. The new requirement calls for the Department of Defense to identify any deficit or surplus capacity "for locations within the continental United States and territories."[40] This level of detail is absent in both previous assessments for one simple reason: it would amount to a BRAC-like list outside the confines of a BRAC round in which installations can be evaluated holistically, not just for occupancy rates. The main question of the new study will be, How will the Department of Defense provide location-level data? The department is unlikely to provide detail on that level, especially given the possible disruptions for the communities that host those installations, such as depressing real estate markets in expectation of reductions in the base or unwillingness of the communities to invest in a base that carries excess capacity.

In the end, the requested assessment is essentially a way Congress found to postpone any decisions on a new round of BRAC while also forcing the

DOD's hand by pushing it to name specific locations potentially affected by a new round of BRAC.[41] Congress effectively delayed any discussion of a new round of BRAC until the 2021 budget cycle. All these studies are preliminary by design with inherent limitations. They do not carry the same level of precision developed by studies in the early stages of BRAC.[42]

Regardless of the total level of excess capacity, a BRAC round has historically reduced only 5 percent of the total infrastructure of the department; it currently has an excess of at least 19 percent of the total capacity.[43] If historical averages are maintained, a new round of BRAC would reduce the infrastructure by just a portion of its current excess. It would still preserve enough excess capacity for force structure growths that the DOD might plan in legacy infrastructure. Thus, delaying the new round of BRAC simply because the force is projected to grow is a poor rationale.[44]

Nonetheless, according to both studies, the reduction in excess infrastructure would generate an estimated annual recurring savings of $2 billion. This estimate is within the historical range for previous rounds of BRAC. The annual recurring savings range from $1 billion for the 1988 round to $4 billion in the 2005 round (fig. 2).[45] These are valuable savings since they come from reductions of fixed costs.

BRACs Have Saved $11.9 Billion in Annual Recurring Costs

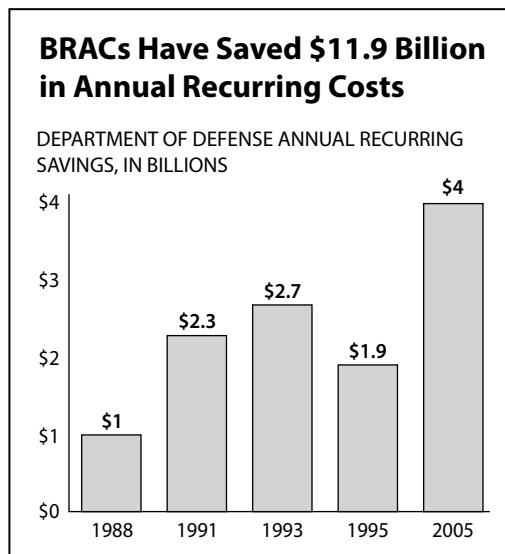DEPARTMENT OF DEFENSE ANNUAL RECURRING SAVINGS, IN BILLIONS

Figure 2. DOD Annual Recurring Savings, 1988–2005. (Adapted from Department of Defense, *Department of Defense Infrastructure Capacity* [Washington, DC: DOD, March 2016], 18, https://defensecommunities.org/wp-content/uploads/2015/01/2016-4-Interim-Capacity-Report-for-Printing.pdf.)

It should be noted that these savings figures are quite challenging to produce and track. Most BRAC savings are cost avoidance; because this type of savings is in itself hard to track, most accounting systems do not monitor it. In the case of BRAC, there will be upfront costs before saving accrue, and any savings will become harder to quantify and track through time. The department has the task of aggregating this untracked cost avoidance savings throughout multiple services and divisions. This is why the GAO first highlighted the obstacles in tracking BRAC-related savings in 1996.[46] Furthermore, the DOD has challenges in tracking and quantifying savings achieved by efforts to improve efficiency. According to the GAO's assessment, the main obstacle is the lack of detailed documentation showing how estimated savings are realized in later years.[47] These challenges should be seen as opportunities to improve accounting practices rather than as a wholesale condemnation of the process. Although not perfect, the 2005 round has generated both increased military value and savings. It has also been studied from multiple perspectives and can be leveraged as a learning tool for subsequent rounds.[48]

Recommendations for Future BRAC Rounds

Absent a BRAC round, the Department of Defense has relied on alternative mechanisms that allow it to shape its infrastructure. Alternatives such as partial conversion agreements with end users, enhanced leases, and demolition of surplus property are available and have been used. However, none of these reach the scope and comprehensiveness of a round of BRAC. Instead of forcing the DOD to resort to alternatives, Congress should work on improving the BRAC process. The structure of the process is solid, but the 2005 round identified some elements for improvement. Chief among them is recognizing the strategic value of infrastructure by pointing out that new rounds should accompany the release of new defense strategies. Other lessons for process reform that can be drawn from the 2005 round include the following: (1) infrastructure capacity studies should be regular reporting requirements; (2) the DOD should maintain personnel dedicated to these studies and to supporting the independent commission during a round; and (3) Congress should set goals for each round.

Congress should follow the 2005 BRAC Commission recommendation and have an automatic trigger for a new round of BRAC whenever a new National Defense Strategy, or equivalent document, is published. Every strategy will change the priorities and the understanding of capabilities evaluated under military value. After all, the very definition of "military value" starts with "the current and future mission capabilities" of the joint force.[49]

Thus, it would be fruitful for the department and nation to evaluate its defense infrastructure in light of those new understandings. If each new defense strategy document were to trigger the authorization of a new round of BRAC, the infrastructure assessment done in the initial stages of a round would serve as a launching point for implementing the new strategy.

A new defense strategy may require changes to the force structure that will be needed to execute it, which is central for the BRAC process and one of the main points of contention in the recent infrastructure studies.[50] Any changes the department makes to the force structure will have important effects on infrastructure that should be analyzed in a new BRAC round. The main goal for lawmakers concerned about the efficient and effective use of resources in military bases should be to transform BRAC from an episodic, sporadic process into a routine one. Associating a round with a defense strategy is a step in that direction.

In addition, Congress should transform the current infrastructure studies into a regular reporting requirement to be delivered with the budget request every four years. Because all of the services must contribute data for these studies, they compel an increased level of cooperation among the military departments. Imposing regularity also would lead to improvements in data collection since there would be a set expectation for data disclosures outside the context of a new round of BRAC. Absent an active round of BRAC, the military departments collect only data in conjunction with their day-to-day operations. An active round of BRAC galvanizes the military departments to gather, unify, and standardize their data to meet the requirements of the assessment. As it stands, the components have little incentive to share, or even to standardize, their data on real property usage.

Furthermore, because of the multiple exit ramps in each round, Congress could leverage the effort to start a BRAC round as an assessment tool to ensure that the infrastructure is adequate. On at least four separate occasions, inaction from one of the parties involved can stop a round of BRAC. But the first stage of a BRAC round by itself is, nonetheless, immensely valuable. In that stage, the Department of Defense collects in-depth data on the usage and occupancy levels of the bases throughout the system. This level of scrutiny reserved for BRAC rounds provides a higher level of confidence in the assessment of the infrastructure beyond those conducted by the recent infrastructure capacity studies.[51] This higher degree of fidelity would be advantageous for the leadership in Congress and the executive branch. It would create an incentive for data to be collected on a day-to-day basis, something that currently does not happen.[52]

The passage of the Defense Base Realignment and Closure Act of 1990 resulted in a flurry of activity that led to five rounds of BRAC in seven years.[53] These initial BRAC rounds happened within a tight timeframe and were able to leverage existing staff expertise and office infrastructure to start the work of the next independent commission. The 2005 commission did not enjoy the same benefits since it occurred 10 years after the preceding round. As such, the commissioners found that "since the 1995 BRAC Commission had been disbanded, there was no pre-existing support structure to manage the administrative start-up needs of the Commission such as recruiting and hiring, leasing space and equipment, and other administrative issues."[54] These routine and seemingly trivial elements led to delays in getting the BRAC Commission working on substantive issues, threatening its viability.[55]

In any bureaucracy, there is an unquantifiable value in knowing whom to consult for which issues, and any staff members new to that environment will have a steep learning curve that will hamper their initial productivity. Therefore, it would be beneficial to keep some core staff within the Department of Defense responsible for supporting BRAC rounds on a full-time basis, especially if the infrastructure capacity study becomes a reporting requirement.[56] This was a recommendation from the 2005 commission that remains highly relevant, given a context in which predictable rounds of BRAC follow defense strategy reviews. The staff would support the commissioners and handle administrative issues when the time came for another BRAC round. It would also be responsible for developing the infrastructure capacity studies and starting a new BRAC round following a new defense strategy.

One of the challenges faced by previous rounds of BRAC was the lack of targets met, both in terms of infrastructure reduction and of cost or savings. This is partially the reason why there were substantial differences in the outcomes of each.[57] Whenever Congress authorizes the next round of BRAC, it should determine goals for the Pentagon so as to establish a shared understanding of what would represent a successful BRAC. Congress would be wise to pick at least two data points, such as a percentage of reduction in plant replacement value and a cap on the implementation costs. A proposal floated by Senator McCain in summer 2017 imposed a cap on the implementation costs, which is a good way to set targets for the department.[58] After more than 14 years without a BRAC round, these types of targets would set a common baseline of expectations, serving as a confidence-building mechanism between the executive and legislative

branches. They would also be useful in determining the ambition of each round and could pave the way for smaller, more frequent BRAC rounds.

Additionally, one of the reasons why the BRAC process has worked in the past is because it avoided some of the political interference in the inherently political process of closing governmental real estate. Avoiding political entanglements should be kept at a premium when thinking about the future of BRAC. BRAC should always serve as a tool to create more military value for each of the nation's installations, not as a way to create jobs in or to punish lawmakers' districts. While politics will always be in the process, the independent commission has a proven track record of insulating the brunt of it.

These recommendations would help make BRAC a more routine process in shaping Department of Defense infrastructure, rather than one-off events that carry the heavy weight of decades of deferred infrastructure action. They would also serve well in the process of implementing the changes required by the current National Defense Strategy and future defense strategies.

Conclusion

In the 10th anniversary of the final report of the 2005 BRAC Commission, Chairman Anthony Principi wrote that "the BRAC process was accomplished five times from 1988 through 2005—but no new rounds have been undertaken in the past decade. In this time of great fiscal constraint, we cannot continue to deny DOD the opportunity to rationalize its vast excess infrastructure."[59] Currently, the country is still experiencing the fiscal constraints imposed by growing entitlement spending in the federal budget, and now there is also the mandate of the new National Defense Strategy.

Implementing a new strategy in the DOD would be incomplete if the department is denied an opportunity to rationalize, or even properly assess, its infrastructure portfolio through a round of BRAC. Until the 2018 budget, a new round of BRAC had consistently been part of the budget request, and Congress has routinely prohibited the use of funds for a new round.[60] In the past two budgets, the DOD has omitted its proposal for a new round of BRAC. This omission is likely due to the political hopelessness created by continued congressional rejection of BRAC, combined with the mandate from the 2019 NDAA to further study the department's infrastructure capacity. It is easy to envision a political debate in which lawmakers would point to the necessity of completing the pending assessment before discussing BRAC. This study is due with the 2021 budget

submission, which will likely be combined with a renewed request for authorization of a new round of base realignment and closure.[61] However, by not even asking for the authorization in the past couple of years, the DOD has completely conceded the argument.

The shift towards great power competition outlined in the National Defense Strategy should serve to focus Congress on what needs to be done to prepare the country for long-term competition. The push to rationalize the defense infrastructure and concentrate those dollars where they best advance the nation's mission will mean moving away from bases that have lower military value, or even positioning more units outside the continental United States, a necessary cost of properly refocusing our armed forces. If the nation is to refocus on great power competition, we will need to concentrate our resources where they have the most value and move away from investments that detract from the main mission.

Overall, it is time for Congress to be an active enabler in the process of rationalizing the Department of Defense's infrastructure. In the 14 years since the last round of BRAC, Congress has been more concerned with parochialism than helping the country improve its defense infrastructure allocation. Congress must now commit to helping the DOD shape its infrastructure. Rounds of BRAC should be seen as an opportunity to check the adequacy of the defense infrastructure against the current strategy, not as seismic events that are less frequent than the census. **SSQ**

Notes

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General Nuclear Compellence: The State, Allies, and Adversaries

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Abstract

The study of compellence has focused on crisis situations. However, compellence may work without crises. If a state possesses the capability to compel a target, the target may choose to make concessions to avoid a crisis and dampen the risk of conflict. This constitutes a form of "general compellence." As with general deterrence, failures in general compellence will result in crises. We discuss this notion of general compellence in the context of nuclear proliferation. Nuclearization may give a state greater ability to compel others by threatening nuclear escalation. This ability yields general compellence leverage vis-à-vis its allies and adversaries. Facing the risk of nuclear escalation, the state's adversaries may offer political concessions, leading to improved relations and détente. The state's allies may offer additional security commitments to diminish the risk that the new nuclear state will use its weapons, leading to tighter alliance relationships. We illustrate our arguments with case studies of France, China, Israel, and South Africa in the aftermath of their nuclear acquisition.

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Much of the research on the consequences of nuclear acquisition has examined nuclear deterrence. While early work on the topic had an almost exclusive focus on "immediate" or "crisis deterrence," over time scholars developed an appreciation for the selection problems inherent in this approach.[1] As a result, the study of deterrence expanded beyond crises, leading to the notion of "general deterrence," the ability of states to deter the initiation of crises.[2] A relatively smaller proportion of the literature on the consequences of nuclear acquisition examines nuclear compellence. Here scholars have primarily focused on the role of nuclear weapons in interstate crises.[3] Using mostly quantitative methods, recent scholarship

has focused on crisis dyads and examined whether nuclear possession—and superiority—shapes the outcomes of such crises.[4] While consensus on these questions remains elusive, in one prominent contribution to this debate, scholars Todd Sechser and Matthew Fuhrmann argue that "nuclear weapons have far less utility for coercive diplomacy than many people believe."[5]

Although a valuable contribution to our understanding of the effects of nuclear acquisition, this debate has two limitations. First, it focuses exclusively on the effects of nuclear acquisition in the course and outcome of crises. Such an approach poses methodological problems because—much like with nuclear deterrence—participation in interstate crises is subject to a process of strategic selection.[6] If a state succeeds in acquiring nuclear weapons, its allies and adversaries may adjust their foreign policies and make concessions to prevent crises from erupting in the first place. Therefore, the states that choose to enter into crises against nuclear-weapons states may be particularly obdurate and strongly resolved, unlikely to compromise under any circumstances.[7] Focusing only on crises may also overstate the extent to which compellence is more difficult than deterrence. Specifically, by focusing only on crisis contexts, we risk understating the ability of states to compel their allies and adversaries more generally in noncrisis settings. For these reasons, the incidence and outcome of nuclear crises may not be representative of the overall compellent effects of nuclear weapons.

A second limitation in the existing nuclear compellence debate is its exclusive focus on interstate dyads. This approach may be justifiable for the study of crisis compellence, but we argue that understanding the dynamics of general compellence requires going beyond adversarial dyads and analyzing the interactions of the nuclear state in its broader strategic environment. This broader but nevertheless structured focus allows us to distill the basic dynamics of general nuclear compellence.

While there is abundant and varied scholarship on the causes of nuclear proliferation, the literature on its consequences is comparatively narrowly focused.[8] The classic distinction regarding the consequences of nuclear acquisition is between negative and positive coercion, or deterrence and compellence.[9] Nuclear deterrence refers to the use of nuclear threats to discourage an adversary from carrying out an unfavorable action. Nuclear compellence is the use of nuclear threats to persuade an adversary to carry out a favorable action.[10] Just as the deterrence literature moved from "crisis deterrence" to "general deterrence," we likewise advocate moving beyond the study of "crisis compellence"—the threat or use of nuclear force to elicit favorable behavior from adversaries or allies during crises. Instead,

we support moving toward "general compellence," defined as the ability of a new nuclear state to elicit favorable ally and adversary behavior in general noncrisis contexts as a result of its possession of a nuclear arsenal. It is important to clarify that general compellence need not be a deliberate strategy. Just as states manage to generally deter adversaries on a day-to-day basis without issuing threats to that purpose, states may similarly generally compel favorable outcomes without issuing specific threats.

Our theory thus makes two contributions. First, it establishes the possibility of nuclear weapons possessing compellent effects outside of crisis settings. In fact, we argue that, given the strategic selection process through which states enter crises, these general compellence effects of nuclear acquisition will likely outweigh the hypothetical compellent value of nuclear weapons in crisis settings. Second, we lay out conditions under which the general compellent effect of nuclear acquisition is likely to be greater or smaller both against adversaries and vis-à-vis allies. The general compellent benefits of nuclear weapons are maximized when a relatively weak state that has a low level of allied commitment nuclearizes. These are the conditions under which nuclear escalation is most likely and, therefore, the conditions under which adversaries and allies will be compelled to offer greater concessions and commitments to reduce escalation risk. Furthermore, rather than seeing nuclear compellence as a dyadic phenomenon, we examine general compellence in its broader strategic environment. Our analysis aims at capturing these dynamics of general compellence by centering on the strategic interaction of three parties: a new nuclear-weapons state, its major ally, and its primary adversary.

The acquisition of nuclear weapons gives a state a greater ability to deter threats and inflict costs should deterrence fail.[11] With these increased capabilities, however, comes a risk of nuclear escalation. This potential inherent in nuclear possession provides the new nuclear-weapons state with compellent leverage vis-à-vis its adversaries and allies. If the risk of nuclear use is greater than an adversary deems acceptable, it will offer political concessions in the hope of improved relations and détente. Likewise, if the risk of nuclear use is greater than an ally is willing to countenance, it will face a choice: either offer additional security commitments to dampen the possibility that its protégé will use nuclear weapons, leading to a tighter alliance relationship, or distance itself from the protégé. Each of these outcomes result from what we label "general nuclear compellence." Understanding how nuclear weapons produce these outcomes is a critical—and still unanswered—question.

This article begins by presenting the strategic logic of general nuclear compellence. Then it illustrates our theory with four cases of general nuclear compellence: France, China, Israel, and South Africa. We conclude with implications for international relations theory and foreign policy.

The Strategic Logic of General Nuclear Compellence

The unique destructive power of nuclear weapons makes them particularly useful resources for states in times of crisis and useful tools of last resort for states "gambling for resurrection."[12] Our argument begins with the simple assumption that introducing nuclear weapons into a strategic situation raises the potential for conflict to escalate to a greater level of destruction.[13] The primary source of the compellent effects of nuclear weapons acquisition lies in this potential for escalation. Nuclear acquisition yields a benefit for general compellence because in a crisis nuclear weapons might be useful. Facing the possibility of nuclear escalation, a state's allies and adversaries internalize this risk and may be compelled to take action to ameliorate it. The potential for nuclear escalation, when sufficiently great, will lead adversaries to offer concessions to a new nuclear state to keep the conflict manageable. Similarly, a new nuclear state's allies, when they have a vital interest in the security of their protégé and the stability of its region, will be driven to provide stronger security commitments to the new nuclear state to mitigate escalation risk. When interest in the security of the protégé and the stability of its region is limited, a new nuclear state's allies may be driven to decrease commitments and protection to avoid entrapment in a conflict that may escalate to nuclear use. In short, the greater the degree to which a new nuclear state's adversaries and allies internalize the heightened risk of nuclear use and, in response, become willing to grant it concessions or commitments, the more effective nuclear weapons will be as tools of general compellence.

Nuclear weapons generally increase the military capabilities of any state that acquires them. When a state obtains nuclear weapons, therefore, we should see policy adjustments by its adversaries and allies as they internalize the greater risks posed by conflict involving a nuclear state. At the same time, certain strategic settings maximize the risk of nuclear escalation and, therefore, the general compellent potential of a nuclear arsenal from the perspective of the state's allies and adversaries. In our view, the potential for nuclear escalation, and therefore the general compellent effect of nuclear weapons acquisition, is conditioned by three variables: power, commitments, and interests.

State Power and Influence

The first, and foremost, variable conditioning the risk of nuclear escalation—and therefore the general compellent effect of nuclear acquisition—is the state's relative conventional power prior to nuclearization. A state's ex ante conventional power can, for analytical purposes, be considered higher or lower than that of its adversaries. A state that is conventionally stronger than its adversaries will be better able to deter threats and inflict costs without the aid of nuclear weapons. On one hand, a relatively strong state will be less likely to find itself in situations in which it needs to escalate to the nuclear level to achieve its security goals. This, in turn, means that adversaries and allies will perceive the risk of escalation to the nuclear level to be limited and will therefore be more measured in their offers of additional commitments (by allies) or concessions (by adversaries). On the other hand, the general compellent effect of nuclear weapons is likely to be greater for relatively weak states than for relatively strong states.

Preexisting Security Commitments

Among states conventionally weaker than their adversaries, the escalation risks brought about by nuclearization will be modulated by a second factor: the level of preexisting security commitments from their allies. As with conventional power, allied commitments to these weaker states can for analytical purposes be seen as relatively high or relatively low. When these allied commitments are relatively high, a weak state will see relatively smaller general compellent effects of nuclear acquisition vis-à-vis adversaries. Much of the effect of nuclear acquisition will manifest itself through increased strategic independence from the ally. While the new nuclear state will now be better able to deter threats and inflict costs independent of its ally, the prior presence of strong commitments means that the overall risk of nuclear use will not necessarily increase. After all, the ally was already committed to use nuclear weapons if necessary for the protégé's security. As a result, the state's adversaries will perceive the threat of escalation to be the same and will therefore be more limited in their concessions to forestall escalation. The ally, however, will be compelled to accept increased strategic autonomy on the part of its protégé.

In contrast, when allied commitments are relatively low, a weak state will tend to enjoy maximum general compellent effects from nuclear acquisition. A weak state for whom allied commitments are relatively low will be more likely to find itself facing circumstances that may lead it to escalate to the nuclear level. This being the case, its adversaries and allies

will perceive the risks of escalation as being substantial and will be compelled to offer considerable commitments and concessions to dampen these risks. In sum, the general compellent effects of nuclear weapons are likely to be most potent in weaker states with low levels of allied commitment.

Level of Interest

Two questions arise on what form general compellence will take. First, when should we expect to see allies making greater or lesser commitments as a result of protégé nuclear acquisition? Second, how will the ally's decision influence the compellent effect toward the protégé's adversaries? When a relatively weak state with a low level of allied commitments acquires nuclear weapons, its general compellent ability is conditioned by a third and final independent factor: the level of interest the ally has in the state's security and the stability of its region. This interest will condition the ally's willingness to incur additional costs on behalf of the new nuclear state. Conceptually, it is worth noting that the level of interest an ally has in the security of its protégé and the stability of its region is distinct from the ally's present level of commitment. Whereas it is unlikely that an ally would make significant commitments to a state in which it has a low level of interest, it is possible, indeed common, for an ally to make relatively low material commitments to protégés in which it has a high level of interest. This happens because allies will often commit what they see as the minimum level of protection needed to deter the state's adversaries.

Analytically, the ally's willingness to incur costs on behalf of the protégé can be seen as either high or low. When the ally's willingness to incur costs on behalf of the state is relatively high, the ally will respond to the state's nuclearization—and to the new escalation risks it brings—by doubling down and making additional material commitments to its security in an attempt to obviate the new nuclear state's need to escalate to the nuclear level. The state's adversaries, for their part, will also react to this greater potential risk/cost of war resulting from the state's nuclearization and the additional commitments to the state's security made by its allies. This means that new nuclear states in these circumstances are also likely to gain concession from adversaries, eager to prevent escalation. Thus, the general compellent effects of nuclear acquisition in these circumstances will be greater commitments from allies and concessions from adversaries.

Finally, when the ally's willingness to incur costs on behalf of the new nuclear state is relatively low, the ally will respond to the state's nuclearization and its newfound escalation potential by distancing itself from the protégé to avoid entrapment in a nuclear conflict over an issue it perceives

as relatively unimportant. This distancing, in turn, leaves the new nuclear-armed state on its own, increasing the likelihood that it will find itself in situations where it needs to resort to nuclear escalation to advance its security interests. Reacting to this heightened risk of nuclear escalation, the state's adversaries will be compelled to grant it political concessions to ameliorate these escalation risks. Therefore, in these strategic circumstances the general compellent effects of nuclear acquisition will be most apparent in the state's relations with its adversaries, leading them to make greater concessions to the new nuclear state. We now turn to historical cases to illustrate our argument.

Historical Cases

In this section, we deploy historical cases from the nuclear age to illustrate the general compellent effects of nuclear weapons. While doing so, we acknowledge the complexity of the historical process and the possibility that numerous other factors beyond nuclear acquisition may have led to changes in the strategic relations between the states discussed in each case. Nevertheless, we believe the historical record is consistent with our claims.

France

Our theory predicts that a relatively weak state with a high level of security commitments from its allies will be able to enjoy greater strategic autonomy from its security sponsor. This expectation is borne out in the case of France. The French acquired their nuclear deterrent in 1960 as an insurance policy against the Soviet threat on the other side of the Iron Curtain in case Paris needed to act independently from the United States.[14] Once Paris possessed the bomb, it no longer depended on the United States for its nuclear deterrent, and therefore it could thenceforth act with greater autonomy from its patron. As a result, French nuclear acquisition gave Paris not only prestige but general compellent benefits in its relationship with the United States. This led Washington to accept increased independence from France, as manifested in reduced French adherence to NATO policy, the withdrawal of French forces from the NATO structure, and the ejection of US forces from French territory. Moreover, French nuclearization allowed rapprochement between France and the USSR while improving French influence in Europe. Finally, as part of its greater strategic autonomy, nuclearization also contributed to providing France with the confidence needed to recognize the People's Republic of China (PRC) in 1964.

France tested its first nuclear device in February of 1960. Facing a massive Soviet threat to the east—and having a variety of foreign policy goals not shared by its main ally, the United States—France was driven toward nuclearization. France's nuclear acquisition was at least partially motivated by important changes to its security environment during the 1950s, such as Washington's "New Look" policy,[15] France's bitter loss at Dien Bien Phu,[16] and the US thwarting of France along with Israel and Britain during the Suez Crisis.[17] French leader Charles de Gaulle would come to the conclusion that "Europe had to develop an independent nuclear deterrent."[18] As he told West German chancellor Konrad Adenauer just months before the French test, "the cause of the United States is not necessarily always our cause. . . . We need the Americans as allies and not as masters."[19]

France was a relatively weak state vis-à-vis its primary adversary, the Soviet Union. In the years running up to its nuclear acquisition, France's military expenditure was approximately one-tenth that of the Soviet Union, with the Soviets having over five times the latent capabilities.[20] By the time France tested its first nuclear device, the Soviet Union possessed an arsenal with 1,605 nuclear warheads.[21] Given France's relative weakness, it is imaginable that it would resort to nuclear escalation in a conflict with the Soviet Union.

But the escalation potential in any conflict between France and the Soviet Union was already expected to be high, prior to France's nuclearization, given the presence of France's most important ally, the United States. Between 1956 and 1960, the United States stationed 340,000 to 440,000 troops in Europe and between 40,000 and 70,000 in France alone.[22] Furthermore, while France rebuffed Washington on its offer for forward-deployed nuclear weapons on French territory, the United States had sizeable nuclear deployments in several neighboring allies.[23] Finally, France had an Article V guarantee through its membership in NATO assuring that "an armed attack against one or more of [the signatories] in Europe or North America shall be considered an attack against them all."[24] These commitments meant that France would be less likely to feel the need to independently resort to nuclear weapons in a security crisis.

Taken together, these factors meant that the general compellent benefits of French nuclearization would manifest themselves in two ways: greater strategic independence from its sponsor, the United States, and greater leverage vis-à-vis its adversary, the Soviet Union, which now had a greater interest in positive relations with France so as to avoid the risk of nuclear escalation. (The Soviets also benefited from introducing a wedge in the Western alliance by encouraging France to distance itself from the United

States, something Paris could now accomplish since it had an independent nuclear capability.)

After acquiring nuclear weapons, France grew increasingly autonomous from the United States, which was forced to accept important foreign policy concessions to the French. For de Gaulle, a nuclear deterrent was necessary for France to reassert itself as an independent power in world affairs. As he argued in late 1961, a "great State which does not possess [nuclear weapons], while others have them, does not command its own destiny."[25] Controlling a French nuclear arsenal, de Gaulle intended to build "a new equilibrium from the Atlantic to the Urals."[26] In this redrawn geopolitical map, France was to possess "a first degree international role, in line with her genius, responding to her interest, proportional to her means."[27]

De Gaulle's strong desire for French autonomy is clear in his two foreign policy guidelines for this period: *mains nettes* (clean hands) and *parole libre* (free words). Taken together, these guidelines required that France not commit itself to joint operations unless it had taken part in the decision-making process and determined that France should not need to consult other world powers when setting its strategy.[28] In practice, de Gaulle steered France away from NATO and engaged in détente with the Soviet Union.

In implementing this foreign policy vision of greater autonomy, de Gaulle quickly began to distance France from NATO and the United States.[29] Just months after France's test, he sent a note to West German chancellor Konrad Adenauer, proposing an end to US direction of NATO as a new basis for the alliance.[30] This was followed by the withdrawal of select French aerial units from NATO's command structure in September of 1960. When French troops returned from Algeria in 1961, they were not integrated into NATO but instead formed a new "First Corps" independent of the Atlantic alliance.[31] That same year, when Britain, the Soviet Union, and the United States approached France over the Partial Test Ban Treaty, Paris quickly turned them down. De Gaulle's concern was that the treaty was a ploy on the part of the superpowers to maintain their nuclear advantage, preventing France from technologically advancing its *force de frappe* (strike force).[32] In 1962 France was offered access to US Polaris missile technology so long as it would integrate it with NATO war plans.[33] De Gaulle summarily rejected Washington's offer, for as he saw it, accepting it "would be the end of any possibility of independent or autonomous atomic action," placing the French arsenal "under the absolute command of the Americans."[34] Furthermore, in 1963 France and West Germany signed the Élysée Treaty of friendship, the text of which, to Washington's consternation, did not so much as even mention the United States, Britain,

or the NATO alliance.[35] In January 1964, de Gaulle distanced his country further from the Western alliance, withdrawing all marine units from NATO command.[36] That same month, France became the first Western power to recognize the PRC diplomatically, against the wishes of the United States and reportedly giving Washington mere hours' notice.[37] Finally, less than a year after its first Mirage IV bombers—and, with them, the French deterrent—became fully operational in October 1964, France announced in September of 1965 its intention to fully withdraw from the command structure of NATO.[38] De Gaulle further requested that NATO dismantle all of its bases and installations on French territory, including its general headquarters in Paris.[39] In making these announcements, de Gaulle pointed out that France would "remain allied with its allies," but that he would be ending the "qualified subordination of 'integration' . . . which places once more [France's] destiny in the hands of a foreign authority."[40]

Also in 1965, less than a year before its airborne nuclear deterrent became fully operational, France inaugurated its "politique à l'Est," an effort to reduce tensions and improve relations with the Soviet Union and the Eastern bloc. De Gaulle saw this move as an "antidote to US hegemony."[41] By this point, the search for a new relationship with the Soviet Union had become a central component of Gaullist France's grand strategy.[42] In the years that followed, the French shifted toward "détente, entente et coopération" with the Soviets.[43] In 1966, the same month France had fully withdrawn from NATO's command, de Gaulle visited Moscow and made reference to "a new alliance between Russia and France."[44] In December 1967—the year when the first French nuclear-armed submarine, the *Redoutable*, became operational—Charles Ailleret, chief of staff of the French armed forces, published an article referencing a strategy of using French nuclear forces to target "tous azimuts" or "all points of the compass."[45] Washington interpreted his views as meaning that France had essentially abandoned the West in the Cold War confrontation. As a preeminent French historian notes, by 1968 "de Gaulle's foreign policy had turned into an all-out crusade against US preponderance and against the established global order."[46]

France's rapprochement with the Soviet Union would be short-lived, however. With the Soviet invasion of Czechoslovakia in August 1968, it became clear to France where its true threats lay, and it began to move back toward reconciliation with the United States and with NATO in short order.[47]

In sum, while French proliferation in the long term did not result in a marked rearrangement of France's overall strategic position, it did allow Paris to attempt to position itself more autonomously from the United

States, on whom it now depended less. Such were the general compellent benefits of French nuclear acquisition.

China

By the time it acquired nuclear weapons, China was a relatively weak state with an ally, the Soviet Union, which was only minimally committed to it and unwilling to incur additional costs on its behalf. In these circumstances, our argument predicts that Chinese nuclearization would result in two significant political developments. First, China's ally would distance itself by reducing its commitments to avoid entrapment. Second, China's adversaries, foremost the United States, would make political concessions to avoid the risk of nuclear escalation. As we will see, these arguments are supported by the PRC's history.

During its nuclear development, China was a relatively weak state compared to its key adversary, the United States. Furthermore, the Soviet Union's commitments to the defense of China were vanishing when Beijing acquired nuclear weapons in 1964 and were all but nonexistent in its aftermath. Lacking a high level of interest in China and East Asia in these years, the Soviet Union was not making additional commitments in the wake of Chinese nuclearization. Consequently, the general compellent effects of China's nuclearization were vast, with the Soviets' distancing opening up serious escalation potential in China's relations with the United States. This potential, to an important extent, encouraged the United States to grant Beijing crucial concessions on Taiwan, making room for the US-China rapprochement of the early 1970s. (Other factors that contributed to US-China rapprochement include US determination to draw down its commitments in the Vietnam War, as well as Washington's willingness to raise China's status vis-à-vis the USSR.)

China conducted its first nuclear test in October 1964. During China's nuclear development period, Washington enjoyed a considerable advantage in conventional forces over the PRC. The United States also averaged nearly twice the Chinese latent capabilities between 1962 and 1964 and outspent Beijing militarily fivefold in these years.[48] Washington also had an arsenal of almost 30,000 nuclear warheads by the time the Chinese acquired the bomb, compounding Beijing's relative weakness.[49] Moreover, the Sino-Soviet alliance was undergoing severe strain and would soon degenerate into open conflict.[50] During the 1950s, Mao accused Khrushchev of "revisionism," which sapped the spirit of revolutionary communism, and Moscow feared what it perceived to be Beijing's cavalier attitude toward US nuclear threats. As the Soviet Union's willingness to incur

costs on behalf of Beijing was relatively low, it distanced itself from its communist comrades in these years. Between October 1964 and March 1969, Beijing claimed that a total of 4,189 incidents occurred on the Sino-Soviet border.[51] In March 1969, the dispute erupted into a full-scale conflict that lasted until September that year.

The relative conventional weakness of the PRC and the distancing of its Soviet ally worked together to magnify the general compellent effects of Chinese nuclear acquisition. Of course, China's nuclear capability meant that Beijing could now guarantee its survival independently from Moscow, and its arsenal also served as a check on Soviet power. Additionally, with its nuclear arsenal, China could substantially increase the potential costs of Washington's support for Taiwan were war to break out.

Taiwan's status had long been the central disagreement between Washington and Beijing. PRC leaders demanded the resolution of the Taiwan question as a precondition for normalization of US-China relations while refusing to renounce the use of force as a matter of national sovereignty.[52] As Mao stated in January 1964, "After we solve the Taiwan problem, we will resume diplomatic relations with America."[53] Taipei, for its part, rejected either a "two Chinas" or a "one China, one Taiwan" solution, aiming instead at eventually reconquering the mainland. Up until the moment when China nuclearized, US officials remained obdurate in their support for Taiwan, even if that meant forfeiting improved relations with China. In December 1963, Assistant Secretary for Far Eastern Affairs Roger Hilsman declared that "so long as Peiping [sic] insists on the destruction of this relationship [between Washington and Taipei] as the sine qua non for any basic improvement in relations between ourselves and Communist China, there can be no prospect for such an improvement."[54]

Once China acquired nuclear weapons, however, the increased military risks of protecting Taiwan from the PRC led Washington to reevaluate its position. As long as the PRC was nonnuclear, the cost of defending Taiwan was fairly low for Washington. It was clear that the Soviet Union did not want to risk a global conflict for the sake of Taiwan. When Mao asked the Soviet Union during the 1958 Taiwan Straits crisis to respond to a US attack with "everything you've got," Gromyko was "flabbergasted" at the suggestion.[55] However, with a nuclear China, the costs that Washington could face in defending Taiwan increased dramatically. Since Taiwan was not a vital interest for the United States, Washington made important concessions on its status, beginning the process of normalizing relations with Beijing.[56]

In a televised address in July 1966, President Lyndon Johnson called for improved relations with the PRC.[57] With the Cultural Revolution in full swing, however, prospects of a peaceful resolution to the Taiwanese question remained slim.[58] It was only by the time President Nixon took office in 1969 that conditions were ripe for a rapprochement. Nixon had long understood the risks of confrontation with a nuclear China. While visiting Taipei a few months after the PRC's nuclear test, he told US diplomats that it was time for Washington to improve relations with the PRC.[59] Two years later, Nixon published an article in *Foreign Affairs* warning of the risks of a nuclear confrontation with China and arguing for bringing the Chinese back into the family of nations.[60]

For the Chinese, Taiwan was the key issue preventing better US-China relations. When inviting US national security adviser Henry Kissinger to visit China in January 1971, Prime Minister Zhou Enlai stated, "There is only one outstanding issue between us—the US occupation of Taiwan."[61] Kissinger accepted the invitation, and upon arriving in Beijing the following July was told by Zhou that "if this crucial question [Taiwan] is not solved, then the whole question [of US-China relations] will be difficult to resolve."[62] Kissinger promptly offered military concessions on Taiwan. The United States would remove two-thirds of the military personnel in Taiwan shortly after the end of the Vietnam War, with the remaining third to be reduced over time.[63] Furthermore, Kissinger indicated that the United States no longer advocated a "two Chinas" or a "one China, one Taiwan" solution, hinting that the political evolution of the situation was likely to favor the PRC.[64]

In his visit the following February, Nixon reaffirmed Kissinger's concessions. Washington would no longer adhere to the position that the status of Taiwan was undetermined: "Principle one. There is one China, and Taiwan is a part of China." Besides drawing down US forces in Taiwan, Nixon pledged that he would "not support any military attempts by the Government of Taiwan to resort to a military return to the Mainland."[65] Conspicuously, Washington did not require the peaceful resolution of the Taiwan question as a precondition for the improvement in US-China relations.

In fact, as he prepared for the conversations, Nixon saw himself as proposing a quid pro quo with Beijing, offering concessions on Taiwan so as to reduce tensions and the potential for nuclear confrontation with the PRC. While in Hawaii on 18 February en route to China, Nixon wrote the following in his diary:

What they want:
1. Build up their world credentials.
2. *Taiwan* [emphasis added].
3. Get U.S. out of Asia.

What we want:
1. Indochina (?)
2. Communists—to restrain Chicom [PRC] expansion in Asia.
3. *In Future—Reduce threat of a confrontation by Chinese Super Power* [emphasis added].

What we both want:
1. *Reduce danger of confrontation and conflict* [emphasis added].
2. A more stable Asia.
3. A restraint on U.S.S.R.[66]

Reviewing the memoranda of conversations of the Nixon-Kissinger visits, which became available in the late 1990s, scholars and policy makers alike agree that US concessions on the status of Taiwan provided the foundation for the rapprochement with the PRC.[67] In 1977, while reviewing the records of these high-level discussions, a National Security Council (NSC) staffer noted that if a common interest in containing the Soviet Union was "the precipitant" of the US-China rapprochement, "the American accommodation vis-à-vis Taiwan was the enabling factor."[68] Without Chinese nuclearization, we argue, this accommodation would have been less likely.

Clearly, several forces led to the US-China rapprochement, such as Washington's desire to undermine the Soviet bloc, policy processes in the United States, and a desire to enlist Chinese support in ending the Vietnam War.[69] China's newfound nuclear status was, we argue, particularly important among these forces. The costs of fractious relations with China increased dramatically with its nuclearization. Given China's relative weakness and the low level of allied support from the Soviets, Chinese nuclear proliferation greatly increased the risk of nuclear escalation. These escalation risks encouraged the Soviets to back off from their ally and consequently compelled the United States to offer important concessions on Taiwan, paving the way for a rapprochement.

Israel

As a relatively weak state in conventional terms, which only enjoyed a low level of security commitment from its allies, Israel derived substantial general compellent benefits from its nuclear acquisition. In such circum-

stances, our argument predicted that the political benefits of nuclear pro-liferation depend upon the ally's willingness to incur additional costs on behalf of the new nuclear state. When the ally considers the security of the new nuclear state and the stability of its region to be an important interest, and is therefore willing to incur significant costs in its pursuit, the ally will double down and increase its material commitments to the security of the new nuclear-weapons state. With its adversaries similarly perceiving the potential for escalation, the state will also gain concessions from its adver-saries to dampen these risks. These arguments are supported in the case of Israeli nuclear acquisition.

Since its establishment in 1948, Israel faced an adverse conventional balance of power vis-à-vis its adversaries, neighboring Arab states. Further-more, Israel received little support from its security patron, the United States. Consequently, Israeli nuclearization considerably raised the risks of nuclear escalation in the Middle East if Washington maintained its standoffish position and Israel were left on its own. At the same time, Washington was deeply interested in the security of Israel and the main-tenance of a stable, US-friendly Middle East. Aware that Israel might be forced to use its nuclear weapons if it were not to enjoy greater protection, the once determinedly "equidistant" United States rapidly increased its material commitments to Israeli security. Peace with Egypt also followed, with Nasser himself reportedly alluding to the importance of nuclear weapons in his decision to improve relations with Israel.

While the Israeli nuclear program is shrouded in a great deal of secrecy, there is little doubt that by May 1967, Israel was a nuclear-weapons state.[70] In the years running up to Israeli nuclearization, the balance of power appeared to favor its adversaries.[71] Israel had approximately one-fifth of Egypt's latent capabilities and typically averaged only 80 percent of its military expenditure. If Jordan, Iraq, and Syria are also considered, this imbalance becomes even more obvious, with the Arab states exceeding Israeli capabilities nearly tenfold and more than doubling Israel's military spending.[72] As an Israeli official told his State Department counterparts in May 1961, Israel faced a truly "grim security situation."[73]

Furthermore, the level of US material commitment to the security of Israel was relatively low. From the late 1950s, the Israelis repeatedly asked Washington for formal security guarantees akin to those extended to NATO allies, but were regularly turned down.[74] Israel did receive some assurances in private from John Foster Dulles, President Kennedy, and President Johnson, and President Kennedy even publicly stated in a 1963 press conference that the United States had "a deep commitment to the

security of Israel."[75] But being mostly private or informal, these assurances did little to calm Israeli fears. What this amounted to, as Prime Minister Levi Eshkol reported to the US ambassador, was that "the Israeli Government could not foreswear nuclear weapon development in the absence of binding [US] security guarantees."[76]

This combination of relative conventional weakness and a low level of security commitments from the United States meant that Israel's nuclear acquisition had maximal general compellent effects. As the sole nuclear power in the region, Israel was seen as likely to resort to nuclear escalation in the event of a serious security crisis precisely because it was conventionally weak, and therefore ran the risk of being overrun by its adversaries. This escalation potential brought about by Israeli nuclear acquisition did give it important leverage in its relations with the United States. In fact, the Israeli program had begun to influence US policy before Israel even had a working nuclear device.[77] Already in early 1965, Prime Minister Eshkol and NSC official Robert Komer signed a memorandum of understanding, through which Washington "reaffirmed its concern for the maintenance of Israel's security" and "renewed its assurance" that it was "committed to the independence and integrity of Israel"; in return, Israel pledged "not [to] be the first to introduce nuclear weapons into the Arab-Israeli area."[78] Over the next few years, this pledge was gradually reinterpreted from meaning that Israel would remain nonnuclear to meaning that Israel would keep its nuclear arsenal under wraps. Therefore, from 1969 onward, the United States' main objective on this matter was "to keep secret Israeli nuclear weapons."[79] As Henry Kissinger wrote to President Nixon, it would be enough "just to keep Israeli possession from becoming an established international fact" since "the international implications of an Israeli program are not triggered until it becomes public knowledge."[80] Chief among these implications was the potential for war with the Soviets, the avoidance of which was the administration's "Number One priority."[81] As Kissinger put it in a memo to Nixon, "public knowledge [of an Israeli program] is almost as dangerous as possession itself," as it "could substantially increase the danger of Soviet-American confrontation in the Middle East."[82]

Keeping the Israeli program secret required that Israel never issue nuclear threats, which in turn required that Israeli forces be able to deal with any security threat using conventional means. This was the reasoning behind Washington's pledge that, in return for Israel's nuclear "ambiguity," the United States would meet all of its conventional weaponry needs.[83] In fact, this reasoning—that a nuclear arsenal would be useful to extract further

security commitments from Washington—was also part and parcel of Israeli strategic thinking. Besides serving as a weapon of last resort in truly extreme military contingencies, Israeli strategists reasoned, Israel's nuclear arsenal would serve as an insurance policy against US abandonment, providing Washington with powerful incentives to keep Israel well-armed. This strategy became "a central aspect of Israel's national security strategy."[84]

It worked. Between 1960 and 1967, US arms sales to Israel were fairly modest, averaging about $80 million per year. Yet in the years that followed, arms sales would grow dramatically, averaging $1.1 billion annually between 1969 and 1973.[85] A similar trend is seen in US loans and military aid. Between 1959 and 1965, these averaged a paltry $6.5 million per year. Yet from 1966 onward, military loans averaged $174 million annually, peaking at $545 million in 1971.[86]

While many factors drove these military aid decisions, the nuclear quid pro quo was a highly significant one. Historian Avner Cohen considers Israeli nuclear acquisition "perhaps the single most important cause for the change in US security commitment to Israel."[87] This view is also confirmed by US policy makers. Former NSC staffer William Quandt, for example, pointed out in 1991 that "there has long been a sense among American policy makers that providing Israel with conventional weapons was justified, in part, by the concern that Israel would otherwise feel compelled to rely exclusively on nuclear deterrence. This widespread view is rarely mentioned in policy deliberations, but I am convinced that it has had an impact on decisions."[88]

The United States would clearly side with Israel during the War of Attrition in 1969–70, and in the aftermath of the civil war in Jordan in 1970–1971, "US-Israeli relations were stronger than ever."[89] US concerns over the possibility that Israel might use nuclear weapons, and Washington's commitment to Israel's security, were on even bolder display during the Yom Kippur War of 1973. There is a great deal of controversy over exactly what transpired during the 20-day conflict, with some claiming that the Israelis explicitly "blackmailed" the United States by threatening to use its nuclear arsenal and that this threat was "critical to the American decision to initiate the airlift to Israel."[90] Others argued that the threat was implicit but nonetheless influential in US decision-making, with still others contending that Israel's nuclear arsenal played no role in US policy decisions.[91] What we do know is that after a disastrous first few days for Israel's armed forces, the United States agreed to provide substantial material support for Israel's war effort.[92] On 9 October, Israel's nuclear-

capable Jericho missiles were put on high alert—reportedly being lubricated, cleaned, and fueled and having their hatches opened; this fact was made known to Washington, possibly on purpose.[93] The same day, and responding to a Soviet airlift to the Arab belligerents, the US administration approved an arms airlift to Israel that, encompassing the delivery of 25,000 tons of supplies over 28 days, was larger than the Berlin airlift of 1948. Washington was firmly on the Israeli side for the remainder of the war and through the years that followed.[94]

Eventually, there was rapprochement between Israel and Egypt as well, with Sadat visiting Jerusalem in November 1977 and the two countries entering a peace treaty less than a year later. While Sadat had many motivations for seeking peace with Israel, there is evidence that Israel's nuclear possession played an important role. For instance, during his historic visit, Sadat himself reportedly implied this in discussions with then-Israeli defense minister Ezer Weizman and Israeli deputy prime minister Yigael Yadin.[95] On Weizman's own account, the importance of Israeli nuclear weapons in motivating the peace negotiations was also mentioned in conversations with three other Egyptian officials, including Prime Minister Mustafa Khalil, Foreign Minister Butros Ghali, and Defense Minister Mohamed Gamasy.[96] As Weizman notes in his memoirs, "Some of the leaders were beginning to realize that they must not force us into a corner where we might—albeit reluctantly—have no recourse but to use nuclear weapons."[97] It is also notable that US concern over nuclear escalation remained. As Kissinger remarked in early 1977, "Israel could use [its nuclear arsenal] . . . if survival is at stake—Israel cannot imagine life under the Arabs."[98] In sum, Israel's conventional weakness and the relatively low level of US allied support meant that its nuclear acquisition brought significant escalation risks to the region. Internalizing these risks, the United States doubled down and increased its material commitments, dramatically altering its relations with the Jewish state. Israel's neighbors also sought to improve relations with the Jewish state.

South Africa

Our theory claims that states that are relatively conventionally powerful in relation to their adversaries will enjoy limited general compellent effects from nuclear acquisition. The case of South Africa is consistent with this argument. South Africa acquired nuclear weapons in 1979, anticipating the possibility that communist forces would take over neighboring Angola and turn it into a safe haven for black nationalist movements. Enjoying a significant conventional advantage over its main adversary, Angola, Pretoria

was seen as unlikely to use nuclear weapons on the battlefield. The nuclear escalation potential in South Africa was therefore seen by its allies and adversaries as being relatively small. Furthermore, given US opposition to the apartheid regime in South Africa, Washington had limited interest in the protection of its ally. Consequently, Pretoria was unable to elicit greater support from the United States. Despite South Africa's entreaties, Washington kept its distance, imposing economic sanctions against the apartheid regime. At the same time, South Africa was able to achieve only modest improvements in relations with its neighbors. While Angola did not appreciably alter its policies regarding its neighbor in the aftermath of Pretoria's nuclearization, South Africa managed to sign nonaggression pacts with Mozambique and Swaziland. Overall, the South African bomb had little to no general compellent effect.

South Africa's primary motivation in developing nuclear weapons stemmed from the communist threat to its regime.[99] Balthazar Johannes ("John") Vorster, prime minister from 1966 to 1978, worried that black liberation movements, such as the African National Congress (ANC) and the South-West African People's Organization (SWAPO), might become a serious threat if supported by neighboring communist powers.[100] Along with his defense minister P. W. Botha, Vorster pursued the development of a nuclear capability as part of an aggressive foreign policy to protect South Africa from this communist threat.[101] When the Carnation Revolution swept Lisbon in April 1974, Portugal withdrew from its African colonies. Mozambique fell to the pro-Soviet Front for the Liberation of Mozambique (FRELIMO), and Angola descended into civil war, with South African–backed forces facing the communist People's Movement for the Liberation of Angola (MPLA).[102] The conflict escalated, with South Africa sending in troops in October 1975 and the MPLA drawing support from Cuba and the Soviet Union.[103] In the process, South Africa accelerated its efforts to develop nuclear weapons.[104] Pretoria constructed its first nuclear device by November 1979 and completed a second one in 1982.[105]

Though obtaining a nuclear deterrent was a priority for the apartheid regime, the military uses of this newfound capability were not readily apparent. By 1977 there was widespread belief that the main objective of South Africa's nuclear program was to elicit US assistance as a "catalytic deterrent."[106] According to this strategy, in a crisis situation Pretoria would inform the United States of its intention to use nuclear weapons, expecting that Washington would boost its conventional support to prevent nuclear escalation. Botha later explained this logic in vivid terms: "Once we set this thing off, the Yanks will come running."[107]

Such a strategy faced two challenges. First, South Africa's advantage in conventional capabilities reduced the likelihood that Pretoria might need to resort to nuclear escalation. South Africa already enjoyed an appreciable advantage in conventional forces over its neighboring adversary, Angola, outspending it militarily by a factor of five in the three years running up to its nuclearization and having seven times its latent capabilities.[108] Given the balance of conventional forces, both South Africa's enemies and its allies fundamentally doubted that Pretoria would ever use its nuclear weapons. Years after the end of the Angolan civil war, Fidel Castro boasted about the heroic achievement of Cuban troops in the conflict: "The right of the matter was whether they would decide to drop it [a nuclear weapon] or not. Who were they going to use the weapon against? Against us? Inside South Africa?"[109] A CIA assessment of April 1981 similarly concluded, "It is difficult to see a near term military usefulness to nuclear weapons except in the most extreme, and unlikely, circumstances. The principal threat to South Africa is likely to remain black urban insurrection and guerillas operating in border areas, for which nuclear explosives would be useless."[110] Overall, South African nuclearization introduced little risk of escalation.

Second, while Washington was keen on stopping the spread of communism in Southern Africa, it also had a limited interest in supporting apartheid South Africa, which explains in part why there was no formal alliance between the two countries. Combined with the meager escalation potential resulting from South Africa's conventional advantages, this limited US interest undermined Pretoria's efforts to extract significant general compellent leverage. While many US officials saw South Africa as an important geostrategic partner in an unstable region, opposition to the apartheid regime was strong in the United States. When US assistance to South Africa in the Angolan Civil War was uncovered in December 1975, Congress passed the Clark Amendment to suspend all aid to Pretoria in the conflict. This abrupt end to US support was seen in Pretoria as an act of betrayal, with Botha later claiming that South Africa had been "ruthlessly left in the lurch" in Angola.[111] And although President Reagan and his assistant secretary of state for African affairs, Chester Crocker, pursued a policy of "constructive engagement" with the apartheid regime, a broad-based sanctions package was passed over a presidential veto in 1986.[112]

Limited US interest combined with South Africa's high relative power to create somewhat distant relations between the two countries. Given South Africa's strength vis-à-vis its adversaries, there was no strict security imperative for Washington to support Pretoria, a partner in the fight

against communism. Analyzing the arc of Pretoria's attempts to use nuclear weapons as a diplomatic tool, Mitchell Reiss, a special assistant to the national security advisor as a White House Fellow in 1988–89, concluded that "it is almost impossible to believe that any American administration would have rushed to extricate the white regime from imminent extinction—and relations only worsened during the 1980s."[113] Yielding to domestic pressure, in October 1983 Washington allowed the UN Security Council to pass a resolution condemning South Africa's role in Angola.[114] In 1986 Congress passed the Comprehensive Anti-Apartheid Act, overturning a presidential veto and once again shutting off nuclear trade with Pretoria.

While relations with Angola would remain hostile through the duration of the apartheid regime, South Africa would sign nonaggression pacts with Swaziland in 1982 and neighboring rival Mozambique in 1984 (the Nkomati Accord). These agreements present a modest improvement in Pretoria's strategic situation, though it must be acknowledged that the pact with Mozambique was driven by the ongoing civil war in that country and a desire by both governments to prevent interventions into each other's territory.[115] The South African bomb appears to have played no obvious direct role in producing these agreements.

Overall, and as our theory predicts for states that were already strong before their nuclearization, the general compellent effects of Pretoria's nuclear acquisition were quite limited. With its nuclear arsenal, South Africa was unable to extract significant new commitments from the United States because, given its relative conventional strength, nuclear escalation was seen as highly unlikely. Its relations with adversaries and neighbors improved only marginally.

Conclusion

Nuclear acquisition increases the ability of a state to deter threats and to inflict costs on its adversaries. Yet these capabilities also introduce the risk of nuclear use in conflict. The potential for escalation brought about by nuclear acquisition has general compellent effects—providing new nuclear states with sources of leverage over allies and adversaries they previously had not possessed. Facing these risks of nuclear escalation, allies may double down and offer nuclear states additional commitments in the interest of dampening such risks; adversaries may offer concessions out of similar motivations. As we have shown, these dynamics of general compellence achieve their greater effect when the new nuclear state is relatively weak vis-à-vis its adversaries and has a relatively low level of commitment from its primary allies. The extent to which allies are willing to incur costs

on behalf of the new nuclear state further conditions the form these compellent effects take. These arguments were illustrated with case studies of French, Chinese, Israeli, and South African acquisition of nuclear weapons. In short, general compellence is an important, and hitherto unrecognized, source of change in relations among nuclear powers and world politics more generally.

These general compellent effects of nuclear proliferation have implications for both theory and policy. Theoretically, highlighting the general compellent consequences of proliferation is a first step toward analyzing how proliferation alters strategic interactions during peacetime. Nuclear acquisition can lead to adjustments in foreign policy by the nuclear state's adversaries and allies that will, in the end, make the military effect of nuclear acquisition less evident. In practice, it is even possible that a new nuclear state will rarely, if ever, need to threaten to use its nuclear arsenal because nuclear acquisition will have led to the political transformation of its strategic environment through general compellence. The greater the general compellent effects of nuclear proliferation, the greater the commitments and concessions the new nuclear state will extract from allies and adversaries, and the less visible the role of nuclear weapons will be as tools of explicit coercion in a crisis context. These are the kinds of effects that the dyadic study of nuclear crises will be much less likely to detect.

In terms of policy, our argument highlights the political costs major powers pay when their adversaries or allies nuclearize. Looking ahead, the effects of nuclear acquisition by a US adversary such as Iran would be more nuanced than an analysis limited to the deterrent effects of nuclearization and its effects on crisis outcomes might suggest. Iran's most important regional adversaries are Israel and Saudi Arabia; its most important global adversary is the United States. And while it is loosely aligned with both Russia and China, it lacks a reliable and powerful security patron. Iran is conventionally outmatched by its regional and global rivals, having just four-fifths of Israel's military expenditure, one-fifth of Saudi Arabia's, and roughly one-fiftieth of the United States' in 2018.[116] Nuclear acquisition by Iran would not only allow it to better deter US military action by increasing the potential costs of conflict, it could also compel Washington to make political concessions to dampen the risks of nuclear escalation. These concessions might include the US distancing itself from allies and partners that share Iran as an adversary but do not represent vital US interests. Conversely, Washington would have to increase its material commitments to allies and partners that *do* share the new Iran as an adversary and that *do* represent a vital US interest. Yet despite these costs,

one potential benefit could be more stable relations with Iran. With a nuclear deterrent capability and with Washington having made important concessions to it, there would be fewer reasons for friction in the relationship, and many crises that would otherwise have emerged would be far less likely.[117]

Likewise, nuclear acquisition by a US ally such as Taiwan would also entail important political costs for Washington. Taiwan is conventionally weak compared with its most important rival, the PRC, which outspent it militarily twenty-three-fold in 2018.[118] While Taiwan is not currently considered a proliferation risk, it has pursued nuclear weapons in the past, and a future nuclear Taipei would force Washington to reconcile its material commitments with US interests in Taiwan's security.[119] Given the greater potential costs of entrapment in a conflict involving Taiwan and China, it would be difficult for Washington to maintain its commitments if the security of Taiwan was not seen as a vital US interest. Nevertheless, if the United States did then see Taiwan as a vital security partner, it would be led to double down and boost its material commitments to Taipei to moderate the risk of nuclear escalation. Understanding these political consequences of nuclear acquisition is essential to formulating adequate policies to deal with both aspiring and new nuclear adversaries and allies. **SSQ**

Notes

1. For a review of the early literature, see Jack S. Levy, "When Do Deterrent Threats Work?," *British Journal of Political Science* 18, no. 4 (1988): 485–512. On selection problems, see James D. Fearon, "Signaling versus the Balance of Power and Interests: An Empirical Test of a Crisis Bargaining Model," *Journal of Conflict Resolution* 38, no. 2 (1994): 236–69; and James D. Fearon, "Selection Effects and Deterrence," *International Interactions* 28, no. 1 (2002): 5–29.

2. Patrick M. Morgan, *Deterrence: A Conceptual Analysis* (Beverly Hills: Sage, 1994), 42–44; and Paul K. Huth and Bruce Russett, "General Deterrence between Enduring Rivals: Testing Three Competing Models," *American Political Science Review* 87, no. 1 (1993): 61–73.

3. Schelling, *Arms and Influence* (New Haven: Yale University Press, 2008); Erik Gartzke and Dong-Joon Jo, "Bargaining, Nuclear Proliferation, and Interstate Disputes," *Journal of Conflict Resolution* 53, no. 2 (2009): 209–33; Matthew Kroenig, "Nuclear Superiority and the Balance of Resolve: Explaining Nuclear Crisis Outcomes," *International Organization* 67, no. 1 (2013): 141–71; Mark S. Bell and Nicholas L. Miller, "Questioning the Effect of Nuclear Weapons on Conflict," *Journal of Conflict Resolution* 59, no. 1 (2015): 74–92; Todd S. Sechser and Matthew Fuhrmann, *Nuclear Weapons and Coercive Diplomacy* (New York: Cambridge University Press, 2017); and Matthew Kroenig, *The Logic of American Nuclear Strategy: Why Strategic Superiority Matters* (New York: Oxford University Press, 2018).

4. A recent exception is Tristan A. Volpe, "Atomic Leverage: Compellence with Nuclear Latency," *Security Studies* 26, no. 3 (2017): 514–44.

5. Sechser and Fuhrmann, *Nuclear Weapons and Coercive Diplomacy*, 5. See also "What We Talk about When We Talk about Nuclear Weapons," *H-Diplo/ISSF Forum*, no. 2 (2014), https://issforum.org/ISSF/PDF/ISSF-Forum-2.pdf.

6. A process of strategic selection or "selection effects" refer to situations in which "factors that influence the choices that produce cases also influence the outcome," thereby introducing bias and

making the cases nonrepresentative (Fearon, "Selection Effects and Deterrence," 7). Put differently, participation in a crisis results from states' choices, themselves influenced by their expectations over the likely outcomes. See also Fearon, "Signaling versus Balance of Power and Interests," 86n34.

7. Sechser and Fuhrmann, *Nuclear Weapons and Coercive Diplomacy*, 88–92; and Vipin Narang, "The Use and Abuse of Large-n Methods in Nuclear Studies," *H-Diplo/ISSS Forum*, no. 2 (2014): 91–97.

8. For reviews, see Scott D. Sagan, "The Causes of Nuclear Weapons Proliferation," *Annual Review of Political Science* 14 (2011): 225–44; and Nuno P. Monteiro and Alexandre Debs, "Conflict and Cooperation on Nuclear Proliferation," *Annual Review of Political Science* 20 (2017): 331–49.

9. Schelling, *Arms and Influence*, 69–91.

10. Schelling refers to deterrence as "a threat intended to keep [an adversary] from starting something" and compellence as "a threat intended to make an adversary do something" (Schelling, *Arms and Influence*, 69).

11. Throughout the article we use the terms "new nuclear weapons state," "nuclear acquisition," and "nuclearization" to mean a state acquiring nuclear weapons. In practice, acquisition consists of a successful test or the construction of a nuclear explosive. The development of latent nuclear capabilities in and of itself does not qualify as nuclearization. Latent capabilities may provide some benefits for a state, but we see the acquisition of nuclear weapons as a more dramatic improvement in a state's military power. For work on latent nuclear capabilities, see, for example, Matthew Fuhrmann and Benjamin Tkach, "Almost Nuclear: Introducing the Nuclear Latency Dataset," *Conflict Management and Peace Science* 32, no. 4 (2015): 443–61; and Rupal N. Mehta and Rachel Whitlark, "The Benefits and Burdens of Nuclear Latency," *International Studies Quarterly* 61, no. 3 (2017): 517–28.

12. Keir A. Lieber and Daryl G. Press, "The Nukes We Need: Preserving the American Deterrent," *Foreign Affairs* 88, no. 6 (2009): 39–51; and Keir A. Lieber and Daryl G. Press, "Conventional War and Nuclear Escalation," unpublished manuscript, 2016.

13. Schelling, *Arms and Influence*, 20; Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca: Cornell University Press, 1989), 6; Barry R. Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Ithaca: Cornell University Press, 1992); Robert Powell, *Nuclear Deterrence Theory: The Search for Credibility* (Princeton: Princeton University Press, 1990); and Robert Powell, "Nuclear Brinkmanship, Limited War, and Military Power," *International Organization* 69, no. 3 (2015): 589–626.

14. For other perspectives on the causes of France's nuclearization, and the role of the psychology of leaders and prestige motivations, see Jacques E. C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (New York: Cambridge University Press, 2006), chap. 4.

15. Georges-Henri Soutou, "La Politique Nucléaire de [The nuclear policy of] Pierre Mendès France," *Relations Internationales* 59 (1989): 319; and Dominique Mongin, *La Bombe Atomique Française, 1945–1958* (Bruxelles: Bruylant, 1997), 310.

16. Fredrik Logevall, *Embers of War: The Fall of an Empire and the Making of America's Vietnam* (New York: Random House, 2012).

17. Diane B. Kunz, *The Economic Diplomacy of the Suez Crisis* (Chapel Hill: The University of North Carolina Press, 1991).

18. De Gaulle quoted in Phillip H. Gordon, *A Certain Idea of France: French Security Policy and the Gaullist Legacy* (Princeton: Princeton University Press, 1993), 48.

19. De Gaulle quoted in Maurice Vaïsse, "Indépendance et solidarité 1958–1963," in *La France et l'OTAN* [France and NATO], eds. Maurice Vaïsse, Pierre Melandri, and Frederic Bozo (Bruxelles: André Versailles, 2012), 236.

20. Latent capabilities throughout the article refer to Composite Index of National Capabilities (CINC) scores from the Correlates of War (COW) National Military Capabilities (NMC) data (v.5.0). Military expenditure figures are also from the NMC data. These figures are reported throughout for three years preceding nuclear acquisition. J. David Singer, "Reconstructing the Cor-

relates of War Dataset on Material Capabilities of States, 1816–1985," *International Interactions* 14, no. 2 (1988): 115–32.

21. Robert Norris and Hans M. Kristensen, "Global Nuclear Weapons Inventories, 1945–2010," *Bulletin of the Atomic Scientists* 66, no. 44 (2010): 81.

22. Dan Reiter, "Security Commitments and Nuclear Proliferation," *Foreign Policy Analysis* 10, no. 1 (2014): 61–80.

23. Memorandum from Secretary of Defense Gates to President Eisenhower, 17 December 1959, *Foreign Relations of the United States* [hereafter *FRUS*]*, 1958–1960*, vol. VII, pt. 2, *Western Europe* (Washington, DC: Government Printing Office, 1993), doc. 149, https://history.state.gov /historicaldocuments/frus1958-60v07p2/d149; and Matthew Fuhrmann and Todd S. Sechser, "Nuclear Strategy, Nonproliferation, and the Causes of Foreign Nuclear Deployments," *Journal of Conflict Resolution* 58, no. 3 (2014): 466.

24. North Atlantic Treaty, art. 5, Apr. 4, 1949, 63 Stat. 2241, 34 U.N.T.S. 243, http://www.nato. int/cps/en/natohq/official_texts_17120.htm.

25. André Passeron, *De Gaulle parle* [speaks], vol. 1 (Paris: Plon, 1962), 357.

26. Andrew J. Pierre, "Visions conflictuelles: La defense, les armes nucléaires et le contrôle des armament dans les relations franco-américaines à l'époque De Gaulle" [Conflicting visions: Defense, nuclear weapons and arms control in Franco-American relations at the time of de Gaulle], in *De Gaulle en son siècle* [De Gaulle in his century], Tome IV, *La Sécurité et l'Indépendance de la France* [Security and independence of France], ed. Institut Charles de Gaulle (Paris: Plon, 1990), 319.

27. De Gaulle quoted in Etienne Burin des Roziers, "L'indépendance nationale selon de Gaulle: fondement et pratique d'une politique" [National independence according to de Gaulle: Foundation and practice of a policy], in *De Gaulle en son siècle*, 227.

28. Burin des Roziers, 231–32.

29. Even before the French test, de Gaulle had asked for a reform of NATO's structure in 1958, suggesting that the United States and Great Britain join France in creating a new body responsible for global security policy. (See Letter from President de Gaulle to President Eisenhower, 17 September 1958, *FRUS, 1958–1960,* vol. VII, pt. 2, doc. 45, https://history.state.gov/historicaldocuments /frus1958-60v07p2/d45.) Eisenhower rejected this proposal, however. (See Letter from President Eisenhower to President de Gaulle, 20 October 1958, *FRUS, 1958–60*, vol. VII, pt. 2, doc. 63.) Later, de Gaulle admitted to expecting this refusal, saying that he was simply looking for an excuse to withdraw from NATO. (See Alain Peyrefitte, *C'était de Gaulle* [It was de Gaulle] [Paris: Galli- mard, 2002]).

30. See Reiner Pommerin, "La France, l'Allemagne et l'OTAN" [France, Germany and NATO], in *La France et l'OTAN*, 267–84, 268–69.

31. Gordon, *A Certain Idea of France*, 54.

32. Pierre, "Visions conflictuelles," 317.

33. Avery Goldstein, *Deterrence and Security in the 21st Century: China, Britain, France, and the Enduring Legacy of the Nuclear Revolution* (Stanford: Stanford University Press, 2000), 196.

34. Colette Barbier, "La France et la force multilaterale (MLF)," in Vaïsse et al., *La France et l'OTAN*, 294.

35. Pommerin, "La France, l'Allemagne et l'OTAN," 269.

36. Pommerin, 281.

37. See Frank Costigliola, *France and the United States: The Cold Alliance since World War II* (New York: Twayne Publishers, 1992), 139; and Garret Martin, "Playing the China Card? Revisiting France's Recognition of Communist China, 1963–64," *Journal of Cold War Studies* 10, no. 1 (2008): 52–80.

38. See Wang Naicheng, "La politique de dissuasion nucléaire indépandante de De Gaulle et la force nucléaire chinoise," in Institut Charles de Gaulle, *De Gaulle en son siècle*, 413; and Benoit Pelopidas, "The Nuclear Straitjacket: American Extended Deterrence and Nonproliferation," in Stéfanie von Hlatky and Andreas Wenger, eds., *The Future of Extended Deterrence in Europe: The United States, NATO, and Beyond* (Washington, DC: Georgetown University Press, 2015).

39. Pierre, "Visions conflictuelles," 317.

40. De Gaulle quoted in Burin des Roziers, "L'indépendance nationale selon de Gaulle," 233.

41. Frederic Bozo, "France, Gaullism, and the Cold War," in Melvyn P. Leffler and Odd Arne Westad, eds., *Cambridge History of the Cold War*, vol. 2, *Crises and Détente* (Cambridge: Cambridge University Press, 2010), 170.

42. See Bozo, 168.

43. Georges-Henri Soutou, "La problématique de la Détente et le testament stratégique de Georges Pompidou," *Cahiers du Centre d'études d'histoire de la défense*, no. 22 (2004): 80. See also Beatrice Heuser, *Nuclear Mentalities? Strategies and Beliefs in Britain, France, and the FRG* (London: Macmillan, 1998), 123.

44. Heuser, 124.

45. Heuser, 127–28; Goldstein, *Deterrence and Security in the 21st Century*, 148; and Sten Rynning, *Changing Military Doctrine: Presidents and Military Power in Fifth Republic France, 1958–2000* (London: Praeger, 2002), 57.

46. Bozo, "France, Gaullism, and the Cold War," 172.

47. Heuser, *Nuclear Mentalities?*, 122; and Goldstein, *Deterrence and Security in the 21st Century*, 149.

48. Singer, "Reconstructing the Correlates of War."

49. Norris and Kristensen, 81.

50. Sergey Radchenko, "The Sino-Soviet Split," in *Cambridge History of the Cold War*, vol. 2, *Crises and Détente*, eds. Melvyn Leffler and Odd Arne Westad (Cambridge: Cambridge University Press, 2010), 349–72.

51. Thomas W. Robinson, "The Sino-Soviet Border Conflict," in *Diplomacy of Power: Soviet Armed Forces as a Political Instrument*, ed. Stephen S. Kaplan (Washington, DC: Brookings Institution, 1981), 268.

52. Gong Li, "Chinese Decision Making and the Thawing of US-China Relations," in *Re-examining the Cold War: US-China Diplomacy, 1954–1973*, eds. Robert S. Ross and Jiang Changbin (Cambridge: Harvard University Press, 2001), 142.

53. Mao quoted in Jie Li, "Changes in China's Domestic Situation in the 1960s and Sino-US Relations," in Ross and Changbin, *Re-examining the Cold War*, 306.

54. Roger Hilsman, "United States Policy toward Communist China, Address Made before the Commonwealth Club at San Francisco, California, on Dec. 13, 1963," *The Department of State Bulletin*, vol. L, no. 1280 (6 January 1964), 15–17.

55. Andrei Gromyko, *Memories*, translated by Harold Shukman (London: Hutchinson, 1989), 251.

56. Note by the Executive Secretary of the National Security Council (Souers) to the Council, 11 February 1949, *FRUS, 1949,* vol. IX, *The Far East: China* (Washington, DC: Government Printing Office, 1974), doc. 314, https://history.state.gov/historicaldocuments/frus1949v09.

57. Lyndon Johnson, Speech on US Foreign Policy in Asia, 12 July 1966, University of Virginia (UVA) Miller Center, https://millercenter.org/.

58. Nancy B. Tucker, *Strait Talk: United States-Taiwan Relations and the Crisis with China* (Cambridge: Harvard University Press, 2009), 24.

59. Tucker, 35.

60. Richard M. Nixon, "Asia after Viet Nam," *Foreign Affairs* 46, no. 1 (1967): 111–25.

61. Kissinger to Nixon, "Conversation with Ambassador Bogdan, Map Room, 11 January 1971, National Security Archive (NSA), Electronic Briefing Book (EBB) No. 66 (2002), doc. 9, 1, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB66/.

62. "Memcon, Kissinger and Zhou, 9 July 1971," NSA, EBB No. 66, doc. 34, 9, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB66/ch-34.pdf.

63. "Memcon, Kissinger and Zhou, 9 July 1971," 12.

64. "Memcon, Kissinger and Zhou, 9 July 1971," 13.

65. "Memorandum of Conversation, 22 February 1972," NSA, EBB No. 106 (2003), doc. 1, 5–6, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB106/.

66. Question mark in the original. James Mann, *About Face: A History of America's Curious Relationship with China, from Nixon to Clinton* (New York: Alfred A. Knopf, 1999), 13–14.

67. Alan D. Romberg, *Rein in at the Brink of the Precipice: American Policy toward Taiwan and US-PRC Relations* (Armonk: Henry L. Stimson Center, 2003), 21, 41; Richard C. Bush, *At Cross Purposes: US-Taiwan Relations since 1942* (London: M. E. Sharpe, 2005), 5; and Tucker, *Strait Talk*, 42, 44.

68. Romberg, *Rein in at the Brink*, 76.

69. John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of American National Security Policy during the Cold War* (New York: Oxford University Press, 2005), 277–81; Evelyn Goh, *Constructing the US Rapprochement with China, 1961–1974: From "Red Menace" to "Tacit Ally"* (Cambridge: Cambridge University Press, 2009); and Robert D. Schulzinger, "The Johnson Administration, China, and the Vietnam War," in Ross and Changbin, *Re-examining the Cold War,* 238–61.

70. Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), 209.

71. We say "appeared" because, in combat, Israeli forces always showed themselves to be more effective than those of its neighboring adversaries, so military expenditures do not capture accurately the balance of power between Israel and the Arab states.

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Cyber Operations as Imperfect Tools of Escalation

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Abstract

There are important empirical reasons to suspect that the risks of cyber escalation may be exaggerated. If cyberspace is in fact an environment that generates severe escalation risks, why has cyber escalation not yet occurred? We posit that cyber escalation has not occurred because cyber operations are poor tools of escalation. In particular, we argue that this stems from key characteristics of offensive cyber capabilities that limit escalation through four mechanisms. First, retaliatory offensive cyber operations may not exist at the desired time of employment. Second, even under conditions where they may exist, their effects are uncertain and often relatively limited. Third, several attributes of offensive cyber operations generate important tradeoffs for decision-makers that may make them hesitant to employ capabilities in some circumstances. Finally, the alternative of cross-domain escalation—responding to a cyber incident with noncyber, kinetic instruments—is unlikely to be chosen except under rare circumstances, given the limited cost-generation potential of offensive cyber operations.

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There is a widespread view among practitioners and scholars that cyberspace is defined by an inherent potential for dangerous escalation dynamics between rivals.[1] On the practitioner side, for example, senior US intelligence and military leaders expressed concerns about first-strike incentives leading to escalation in a 2017 joint statement to Congress, testifying that "adversaries equipped with [offensive cyber capabilities] could be prone to preemptive attack and rapid escalation in a future crisis, because both sides would

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have an incentive to strike first."[2] On the academic side, there is a palpable fear that cyberspace is an environment in which offense has advantages over defense and that this—coupled with factors such as problems of attribution, poor command and control, and the absence of meaningful thresholds or red lines—generates real risks of inadvertent escalation.[3] Concerns about escalation grew even more passionate in the wake of the US Department of Defense's release of its 2018 Cyber Strategy document, which articulates an operational concept of "defending forward" in which the DOD "disrupt[s] or halt[s] malicious cyber activity at its source."[4]

However, there are important empirical reasons to suspect that the risks of cyber escalation may be exaggerated. Specifically, if cyberspace is in fact an environment that (perhaps even more so than others) generates severe escalation risks, why has cyber escalation not yet occurred? Most interactions between cyber rivals have been characterized by limited volleys that have not escalated beyond nuisance levels and have been largely contained below the use-of-force threshold.[5] For example, in a survey of cyber incidents and responses between 2000 and 2014, Brandon Valeriano et al. find that "rivals tend to respond only to lower-level [cyber] incidents and the response tends to check the intrusion as opposed to seek escalation dominance. The majority of cyber escalation episodes are at a low severity threshold and are non-escalatory. These incidents are usually 'tit-for-tat' type responses within one step of the original incident."[6] Even in the two rare examples in which states employed kinetic force in response to adversary cyber operations—the US counter-ISIL drone campaign in 2015 and Israel's airstrike against Hamas cyber operatives in 2019—the use of force was circumscribed and did not escalate the overall conflict (not to mention that force was used against nonstate adversaries with limited potential to meaningfully escalate in response to US or Israeli force).[7]

We posit that cyber escalation has not occurred because cyber operations are poor tools of escalation. In particular, we argue that this stems from key characteristics of offensive cyber capabilities that limit escalation through four mechanisms. First, retaliatory offensive cyber operations may not exist at the desired time of employment. Second, even under conditions where they may exist, their effects are uncertain and often relatively limited. Third, several attributes of offensive cyber operations generate important tradeoffs for decision-makers that may make them hesitant to employ capabilities in some circumstances. Finally, the alternative of cross-domain escalation—responding to a cyber incident with noncyber, kinetic instruments—is unlikely to be chosen except under rare circumstances, given the limited cost-generation potential of offensive

cyber operations. In this article, we define cyber escalation and then explore the implications of the technical features and requirements for offensive cyber operations. We also consider potential alternative or critical responses to each of these logics. Finally, we evaluate the implications for US policy making.

Defining Offensive Cyber Operations and Escalation

Escalation, broadly defined, involves some meaningful increase in the nature or intensity of a conflict. It occurs when at least one party to a conflict crosses what at least one party perceives to be a critical threshold.[8] Escalation occurs "when at least one of the parties involved believes there has been a significant qualitative change in the conflict as a result of the new development."[9] A state could escalate through quantitatively ratcheting up the amount of pain it inflicts on its adversary using the same type of capabilities, or qualitatively through introducing a new type of capability (the latter is what Bernard Brodie dubbed a "firebreak").[10] Escalation could occur deliberately through moving up Herman Kahn's famed "escalation ladder" to achieve victory in a crisis, or inadvertently through security dilemma dynamics, misperceptions, windows of opportunity and vulnerability, or bureaucratic processes and standard operating procedures.[11]

Escalation could occur along analogous pathways in cyberspace. The cyber literature is predominantly concerned about conditions under which one state's use of offensive cyber capabilities could unintentionally trigger an escalatory spiral with a rival.[12] This scenario could hypothetically occur if the target responds with more intense and costly cyber means (cyber escalation within the cyber domain) or through breaching the cyber-kinetic threshold (cross-domain escalation).

However, we anticipate that the use of offensive cyber capabilities is unlikely to trigger escalatory responses, both within cyberspace and across other domains. Our argument that offensive cyber operations are poor tools of escalation rests on what we identify as the technical foundations of cyber capabilities. Of course, technical factors alone are insufficient to completely account for state decision-making about courses of action in response to adversary cyber operations. A full assessment of the determinants of escalatory decision-making must consider a range of factors, such as the salience of interests at stake, a decision-maker's approach to risk, and cognitive biases. However, we claim that the technical characteristics of offensive cyber capabilities play an important role in circumscribing the options available to states, generating tradeoffs that decision-makers must consider, and creating breathing room during crises that, taken together,

dampen potential pathways to escalation. More often than not, the potential use of cyber capabilities in an escalatory fashion is time intensive, unreliable and unpredictable, and limited in the magnitude and range of effects. Below, we propose general hypotheses for how what we identify as key characteristics of offensive cyber are linked to potential pathways to cyber or cross-domain escalation in response to adversary cyber operations. We intend for these hypotheses to serve as a useful springboard for further empirical research on the link between the technical features of cyber capabilities and their utilities for escalation. The hypotheses are summarized in table 1.

Table 1. Linking offensive cyber attributes with escalation pathways

Cyber Attributes	Escalation Pathways
Role of access, nonuniversal lethality, and temporal nature of access and capability development and maintenance	Lack of cyber escalation options at the desired time and implications for considering alternative courses of action
Nonphysical nature of offensive cyber capabilities and limits on cost generation	Limited costliness of effects
Role of secrecy, attribution, and espionage	Countervailing tradeoffs
Nonphysical nature of offensive cyber capabilities, nonuniversal lethality, and limits on cost generation	Lack of willingness for cross-domain escalation in response to cyber incident with limited relative costs

Technical Features and Requirements for Offensive Cyber

Key features of cyber operations—the role of access, nonuniversal lethality of offensive cyber capabilities, and the temporal nature of access and capability development and maintenance—may dramatically circumscribe the escalatory options available to states through cyber means during a time of crisis.

First, escalatory cyber response options may simply not be available to a state because it lacks access to an appropriate set of targets against which to deliver an escalatory response. This is because offensive cyber operations deliver effects against targets through exploiting a vulnerability to gain access (through an attack vector) to a target's network or system and deliver a payload that is activated by communicating back with a host or triggered by a command order written into the code.[13] Absent the right access to deploy a capability, the latter might as well not exist.[14]

While critical to the success of offensive operations, the initial penetration of a target network or system can be resource intensive and net unpredictable results, which is why the employment of cyber capabilities that rely on access to a targeted network require prior planning and resource allocation

and development. Indeed, according to Chris Inglis, the planning staff at US Cyber Command during the 2009–10 period assessed that "the first 90 percent of cyber reconnaissance (i.e., ISR), cyber defense, and cyberattack consisted of the common work of finding and fixing a target of interest in cyberspace."[15] Therefore, rather than occurring at lightning speed, cyber operations have crucial aspects that take time and significant resource investments, even if at the tactical level a line of code can indeed be executed at "network speed."[16]

Considering means of access and types of targets reveal the various aspects of gaining access that limit potential cyber escalatory responses at a given time. Table 2, Mainstream means of gaining access, depicts various common access methods and evaluates them along a spectrum of cost, risk, and reliability.[17] The broadest distinction between means of access is remote (e.g., using the Internet) versus close (e.g., gaining access through a human agent or supply chain interdiction). Most of the low-cost and low-risk means of gaining access to a target (such as through various social engineering mechanisms) are not readily applicable against more hardened (and therefore more strategically valuable) targets, such as the air-gapped networks common in critical infrastructure systems and some military and defense systems. Conversely, the most reliable type of access, physical access through a human intermediary on the ground, is also the riskiest and costliest.

The nature of the targeted network or system also shapes access requirements and consequent level of difficulty. For instance, gaining access to operational technology (OT) is typically more difficult than to information technology (IT), although this may be changing as IT and OT systems converge.[18] OT networks tend to be closed (they do not touch the global Internet) and run unique protocols used to control highly specific processes and systems.[19] Typically, these characteristics also mean that these networks require specific knowledge because the programs they run are customized to those systems and the networking protocols they employ may not be widely proliferated. Additionally, the simple fact of "gaining access" to a target network does not guarantee that an attacker has gained access at the requisite network layer from which to launch an offensive operation.[20] Thus, most access operations are followed by operations that enable persistence through access escalation prior to the employment of any cyber weapon. Finally, gaining access to a target via a hardware implant—the actual physical components of a computer (e.g., motherboard, USB and other flash memory devices, routers, etc.)—is appreciably costlier and more difficult than gaining access to software (all of the digital programs

Table 2. Mainstream means of gaining access

Remote access	*Cost*	*Risk*	*Reliability*	*Feasibility against target sets*
Hacking: Using a computer to gain unauthorized access to a system using a suite of tools.	Low to High	Low to Medium	Low to High	Can be resource intensive depending on the target.
Phishing: Mass and indiscriminate dissemination of e-mail containing malware.	Low	Low	Low	Not feasible against air-gapped networks.
Spear phishing: Tailored dissemination of e-mail containing malware.	Low	Low	Medium. More targeted than phishing so more reliable but depends on the sophistication of social engineering. Ability to deliver the effects also depends on controls within a network.	Not feasible against air-gapped networks.
Whaling: Similar to spear phishing but targets a high-profile individual.	Low to Medium	Low	Medium. Tends to be more reliable compared to spear phishing given the highly targeted nature of the operation; however, can be resource intensive as it requires increased social engineering and target development and is often against a hardened target.	Not feasible against air-gapped networks.
Pharming: Directing Internet users to a cloned, but bogus, website that prompts them to provide user credentials.	Low	Low	Low	Not feasible against air-gapped networks.
Man in the middle: A common hacking operation that can rely on remote or physical access to essentially eavesdrop on communication between two parties.	Low to High	Low to High	Low to High	Varies depending on remote or close access.

Close access	*Cost*	*Risk*	*Reliability*	*Feasibility against target sets*
Supply chain interdiction: Intercepting and compromising a software or hardware component of the targeted network prior to delivery.	Medium to High	Low to Medium	Low to Medium. Attacker has no guarantee of how infected systems will react in the targeted environment or even that they will be used.	May be one of the only viable means to gain access to a closed system, but requires extensive planning and intelligence collection.
Physical access: Emplacing an operator on the ground to physically gain access to the targeted system and infecting it via a software or hardware implant.	High	High	Medium to High. Varies depending on what capabilities the operator has for the operation. It may be difficult to engineer solutions for data exfiltration if required.	May be one of the only viable means to gain access to a closed system. Often requires a trained operator surreptitiously gaining access to a targeted system or finding a person with access to wittingly or unwittingly deliver the exploit.
Wireless access: Associating wirelessly, typically via Wi-Fi or Bluetooth, as a mean to inject a software capability or harvest credentials. Standoff distance can vary greatly depending on the frequency the attacker is exploiting and the power emitted by the transmitter.	Medium	Medium to High	Low to High. Varies depending on what capabilities the operator has for the operation.	Feasibility varies depending on the standoff distance necessary to deliver the exploit and the permissibility of the environment of the operation.

on a computer, from the operating system to applications such as Microsoft Word).[21] Software vulnerabilities are relatively easier to detect and to patch, and manufacturers routinely disseminate information about known vulnerabilities and remediation protocols.[22]

Second, in addition to being dependent on access, offensive cyber capabilities lack universal effectiveness. While nuclear or conventional munitions are target agnostic—in most cases, the same munition can be used to target an aircraft hangar, a massed enemy formation, a munitions factory, or a hospital—some cyber weapons must be tailored to a specific target set or type.[23] As Martin Libicki notes, "A piece of malware that brings one system down may have absolutely no effect on another. The difference between the two may be as simple as which patch version of a piece of software each system runs."[24] The 2017 WannaCry ransomware attack that wreaked billions of dollars in damage and was attributed to North Korea's Lazarus Group, for instance, targeted hundreds of thousands of computers around the world across a range of industries that were running an older version of Windows.[25] The widespread damage belies the highly specific and targeted nature of the malware—almost all of the affected systems were running a version of Windows 7; the same strain of malware had no effect on computers running more up-to-date operating systems. Moreover, asset owners of targets of strategic significance—such as critical infrastructure—typically employ highly customized software and specific hardware with tailored configurations that are unique to those systems and usually only intimately understood by the original developers and manufacturers. It has been reported, for example, that the malware employed in the Stuxnet cyberattacks against the Iranian nuclear program was tailored to target the specific model of Siemens programmable logic controllers (PLC) used at the Natanz enrichment facility.[26] Indeed, while Stuxnet was discovered in computers around the world, it delivered destructive effects only against the centrifuges in Natanz.[27] The non-substitutability of entire classes of offensive capabilities by definition increases the cost of developing an arsenal of offensive cyber capabilities.[28]

Therefore, the time and resource requirements to gain access and develop specific offensive capabilities may render important escalatory response options infeasible or impractical at the desired time. Operational planning and execution must consider that a given capability may not be usable or even exist at a chosen time of employment.[29] As the above discussion illustrates, many of the target sets that would represent strategic (and therefore escalatory) targets, such as a state's critical infrastructure or nuclear command and control, demand extensive planning,

pre-positioning, and capability development in advance of employing offensive capabilities. Therefore, the timing of a crisis plays a crucial role in decisions about cyber escalation responses. Specifically, the time required to develop access to hold strategic targets at risk means that, even if a state seeks to escalate against an adversary using cyber means, it may find itself limited by the accesses and capabilities it possesses at the moment a crisis occurs. Cyber response options may be limited to less decisive or more vulnerable target sets, rather than those that are more strategically significant.

Third, these limitations become even more salient when we consider how strategic interactions are likely to play out over time during repeated crisis interactions. Because the virtual domain is changeable in a way that the physical world is not, actions taken by defenders in the context of a crisis can radically and unpredictably alter an attacker's ability to deliver and sustain effects against a target over time.[30] Access and capabilities are neither guaranteed nor indefinite—they have a shelf life.[31] Footholds into a target's network that were time intensive to develop can unexpectedly disappear as vulnerabilities in a network are patched. Exploits may have a short shelf life as revealing information about them enables targets to identify indicators of compromise (IOCs) and use these to prevent further damage from specific malware strains or quarantine malicious traffic using known malware signatures. An example of the latter is the US Cyber Command initiative, beginning in 2018, to share information about adversary malware by uploading samples to VirusTotal.[32] Therefore, a target can "transition from vulnerability (to a particular attack) to invulnerability in, literally, minutes."[33] Third-party disclosure about software vulnerabilities by governments or private actors can also unintentionally precipitate the loss of access as exposure about vulnerability information enables network defenders to take measures to remedy them.[34] For instance, the disclosures that began in 2016 by the group Shadow Brokers of purportedly pilfered US National Security Agency exploits and zero days ostensibly put US government accesses at risk.[35] Put simply, a vulnerability upon which an access relies may in theory be only one update or disclosure away from being patched.

Thus, in the context of an ongoing crisis interaction between an attacker and defender, the former's operational tempo is likely to be interrupted by the latter's behavior, forcing the attacker to devote additional time to find or acquire new vulnerabilities and exploits in the midst of an offensive operation or campaign. As Inglis notes, to succeed in an offensive cyber campaign that unfolds over time, attackers must be able to sustain "the efficacy of tools under varying conditions caused by the defender's response and the natural variability and dynamism of cyberspace."[36] The ability to

build or acquire new accesses and capabilities "in real time" during a crisis is highly limited.[37] Indeed, General Paul Nakasone remarked in a January 2019 interview on the radical difference in shelf life between conventional and cyber capabilities:

> Compare the air and cyberspace domains. Weapons like JDAMs [Joint Direct Attack Munitions] are an important armament for air operations. How long are those JDAMs good for? Perhaps 5, 10, or 15 years, sometimes longer given the adversary. When we buy a capability or tool for cyberspace . . . we rarely get a prolonged use we can measure in years. Our capabilities rarely last 6 months, let alone 6 years. This is a big difference in two important domains of future conflict.[38]

Therefore, as a 2013 Defense Science Board report notes, "offensive cyber will always be a fragile capability" when pitted against network defenders who are "continuously improving network defensive tools and techniques."[39]

Each side can take defensive measures to blunt the impact and effectiveness of the other's access and capabilities—particularly as information about them is revealed. Consequently, strategic accesses and capabilities are likely to become more vulnerable and less reliable over time, shrinking the set of cyber escalatory response options for all parties. This cycle is likely to generate temporal breaks in the pace of adversarial engagements in cyberspace, where states must regroup and develop or rebuild accesses and capabilities during an ongoing interaction. These pauses are likely to diffuse the pressure that typically accompanies—even defines—crisis situations, creating breathing space and, by extension, room for decision-makers to deliberate alternative courses of action, for domestic political tensions to cool down, for intent to be communicated to adversaries, and for de-escalation pathways to be determined.

A potential counter to this argument is that most states likely already appreciate the time and resources required to develop accesses and tools, as well as their fragility. Therefore, those with sufficient resources are incentivized to alleviate these concerns through investing heavily in developing the ability to gain pre-positioned accesses and a range of capabilities and platforms to be prepared for the onset of a potential future crisis. Evidence of this kind of behavior could be, for example, the discovery of Russian malware in US critical infrastructure reported in 2018.[40] While dormant access is almost certainly the case, states are likely to remain stymied by inadvertent or deliberate discovery of these efforts prior to a crisis. More importantly, even if pre-positioned accesses and capabilities are available in the opening moments of a crisis, the difficulties of maintaining

them during iterated volleys between adversaries are likely to persist and blunt the ability of a given party to continue escalation of cyber capabilities.

Limited Costliness of Offensive Cyber Effects

Even under circumstances in which a state may possess the right cyber response capabilities at the desired time, its response may not generate sufficient costs against the target to be perceived as escalatory.[41] Fundamental limits on the cost-generation potential of offensive cyber operations stem from the fact that cyber capabilities lack the physical violence of conventional and nuclear ones. Cyber weapons target data; they disrupt, manipulate, degrade, or destroy data resident on networks and systems or in transit.[42] Moreover, aside from those cyber capabilities that permanently destroy data and for which there are no backups to which a target can revert, cyber effects are temporary and often reversible.

The utility of military instruments of power for the purposes of coercion or brute force inheres in their abilities to inflict—or credibly threaten to inflict—significant damage and harm against a target state (its civilian population or its military forces) to achieve a political objective.[43] Cyber weapons could be (and have been) used to disrupt an adversary's networks and systems—overwhelming them such that they temporarily lose the ability to function or the target loses confidence in their reliability—or even to produce destructive effects by destroying data resident on these systems or, in rarer circumstances, producing effects in the physical realm.[44] While conducting multiple cyberattacks against a targeted state's critical national infrastructure, for example, could in theory generate significant economic and national security consequences, the temporal aspects of offensive cyber operations as described above limit the ability of even the most capable states to sustain persistent, high-cost effects against multiple strategic targets over time. There is simply no guarantee that a state can generate significant costs against a target in the context of an unfolding crisis. This reality starkly contrasts with the relative predictability and reliability of conventional effects. Indeed, the empirical record has largely validated this claim; "the vast majority of malicious cyber activity has taken place far below the threshold of armed conflict between states, and has not risen to the level that would trigger such a conflict."[45] This is why, in Lin's parlance, "going cyber is pre-escalatory" and countervalue cyberattacks (those that target civilian, rather than military, assets) occur "all the time now and are at the BOTTOM of the escalation ladder" [emphasis in original].[46] Rather than their ability to wreak permanent, destructive

effects, cyber operations are often prized for their temporary and reversible nature.[47]

One metric to assess the cost-generation potential of offensive cyber is in terms of loss of life. By this measure, cyber operations are unlikely to inflict significant harm. While theoretically possible that cyber operations could lead directly to a loss of life, no one has reportedly died to date as a direct result of a cyberattack despite over 30 years of recorded cyber operations.[48] Even in hypothetical catastrophic scenarios, the cost in terms of human casualties is minimal. For instance, common worst-case scenarios of cyberattacks revolve around the loss of power stemming from a cyberattack on an electric grid.[49] However, even in this instance, the conceivable damage from the loss of power over an extended period is far less than that which could be wreaked using basic, limited conventional capabilities. To draw a comparison, when Hurricane Sandy hit the United States' eastern seaboard in late October 2012, over 8.5 million people were left without power—with many going weeks and even months before it was brought back online.[50] Yet a US National Hurricane Center postmortem of Hurricane Sandy reported that of the 159 people in the United States killed either directly or indirectly, only "about 50 of these deaths were the result of extended power outages during cold weather, which led to deaths from hypothermia, falls in the dark by senior citizens, or carbon monoxide poisoning from improperly placed generators or cooking devices."[51] If a cyberattack took out power of a similar magnitude and duration of Hurricane Sandy, it is conceivable that an equivalent number of casualties would result. The 2015 synchronized cyberattacks against Ukrainian power companies, attributed to Russia, was the first known example of an offensive cyber operation targeting a state's power grid. Its cost was ultimately low—service was temporarily disrupted to 225,000 customers for several hours, and energy providers operated at a limited capacity for some time after service was restored.[52] There were no reported casualties from this power outage. While any casualty resulting from a cyberattack would certainly be lamentable, even worst-case scenario figures are minor in comparison to the cost in human lives stemming from other, even limited, kinetic military operations.

It is also possible to measure the cost of offensive cyberattacks in treasure rather than blood. By this standard, the financial or economic costs of cyberattacks are significant. For example, the most devastating and expensive cyberattack to date—the 2017 NotPetya malware that inflicted widespread economic damage against multinational corporations—reportedly cost Maersk and FedEx $300 million each, and the total cost of the Not-

Petya attacks is estimated to be $10 billion.[53] Despite this, even the most financially costly cyberattacks have thus far failed to invoke "act of war" or "act of force" thresholds.[54] Targets have also demonstrated a consistent ability to recover even from destructive cyberattacks with relative speed. In two such cases attributed to North Korea—the 2013 South Korean banks' attack and the 2014 Sony attack—"despite the destruction of files, all are still in business, and none spent more than an inconsequential amount of time recovering."[55] This does not imply that the economic costs of cyber operations are unimportant or lack strategic consequence. However, particularly when they occur in the absence of physical violence, contextualizing the cost of offensive cyber operations raises doubts about their effects in comparison to other types of offensive military operations.

Therefore, even if a state has the capabilities at the time and chooses to respond to a cyberattack with what could be characterized as a potentially escalatory offensive cyber operation, the effects of the response may not be sufficiently high to sustain or provoke a continued escalatory spiral between the parties. One possible counterargument to this line of reasoning is that states may perceive the costs of offensive cyber operations differently from each other, and this divergence could generate escalation risks. This concern is not new to the escalation literature; Herman Kahn acknowledged that his concept of an escalation ladder likely reflects a Western approach to escalation, and that the Soviet Union may take a different approach to conceptualizing such a ladder.[56] Similarly, in cyberspace, differences in factors such as strategic and organizational culture, regime type, strategy and doctrine, and force employment may mean that what is perceived as a relatively low-cost cyber response by one state may be in fact cross a key threshold of the other. We acknowledge that this is a legitimate concern, but one that could be remedied through improving ongoing efforts between adversaries to establish confidence building measures (CBMs) to signal intent and reduce crisis instability.[57] One example is the 2013 bilateral agreement between the United States and Russia to use the Nuclear Risk Reduction Center (NRRC) to communicate about cyber incidents.[58]

Countervailing Tradeoffs

Even under hypothetical circumstances in which a state possesses the ability to escalate using cyber means, three characteristics of offensive cyber operations may blunt its willingness to do so: operational requirements for secrecy, attribution difficulties, and the role of espionage.

First, while secrecy is sometimes hypothesized to aggravate rather than relieve tensions because it increases uncertainty, in a cyber context the

operational requirement for secrecy can give decision-makers pause when weighing tradeoffs. For example, the costs associated with conducting a noisy offensive cyber operation may jeopardize important intelligence assets (discussed below) or render obsolete capabilities that a state may want to hold in reserve for some future engagement where stakes or interests may be higher.

Secrecy is key for operational success. Revealing plans to gain accesses to a target and efforts to develop tools (particularly highly tailored ones) prior to or during the course of an operation permits defenders to take concrete steps to render the threat inert.[59] In particular, secrecy is essential to maintaining access once a vulnerability has been discovered and an exploit built for it, especially once an attacker has already gained a foot-hold in a network but has not yet completed execution of its mission. Attackers must keep their behavior secret from network defenders who are employing multiple layers of methods to uncover and defeat the intrusion at each stage of the attacker's operation. Employing host-based hiding techniques, for example, prevents defenders from detecting an attacker's presence.[60] Network defenders can employ intrusion-detection approaches to uncover adversaries attempting to gain access to a network, such as deploying perimeter sensors to detect activity at all ingress and egress points in a network. Sophisticated defenders will also collect and analyze data about anomalous behavior within a network perimeter after a hypo-thetical adversarial breach, such as identifying novel or remote executables.[61] If the target uncovers the presence of an adversary on its networks and has information about the attack vector, it can marshal defenses and take measures to patch vulnerabilities, rendering moot the attacker's access (and therefore whatever effects might be delivered). This is why military and intelligence organizations, for instance, typically maintain secrecy about zero-day exploits and why markets for zero days on the Dark Web proliferate.[62] Indeed, from a defensive perspective, cyber hunt teams exist because attacker obfuscation is so integral to offensive missions, particu-larly when attempting lateral movement or privilege escalation within a network. Secrecy is also critical to preserving the tool itself because expos-ing that information allows the target to develop defenses against it and may also reveal the attacking state's targeting strategy and broader set of capabilities.

Therefore, the decision to conduct an offensive cyber operation in re-sponse to adversary behavior demands that decision-makers weigh the potential costs of burning accesses and tools revealed through the opera-tion. In other words, cyber operations have a "use it and lose it" quality.

Some might postulate that this attribute generates perceived windows of opportunity and vulnerability such that a state would be more likely to use any offensive capabilities it may possess at the moment out of the fear that they won't be available for future use.[63] While these incentives may exist when stakes are high, or for decision-makers with certain risk profiles, the reverse is also true: using a capability nearly guarantees that it won't be available for future use.

Second, beyond operational requirements for secrecy, states make political decisions to eschew attribution for offensive cyber operations.[64] States employ technical methods to avoid attribution (e.g., obfuscating points of departure of attacks by using spoofing, proxy servers, third-party infrastructure, compromised certificates, and other anonymizing capabilities) as well as make deliberate efforts to obscure command and control for cyberattacks (e.g., using cyber proxies with varying degrees of plausible deniability).[65] The time requirements for a targeted state to achieve attribution at a reasonable confidence threshold, as well as its willingness to share potentially sensitive intelligence information with allies or domestic publics to justify any escalatory responses, create additional temporal breaks for the pressure of a crisis situation to diffuse and for decision-makers to evaluate alternative courses of action.

Finally, related to the role of secrecy in cyber operations is the inextricable link between espionage—particularly cyber intelligence, surveillance, and reconnaissance (ISR)—and offensive cyber operations.[66] Cyber ISR is "an *essential predicate* and enduring companion to mission success in the cyber realm" [emphasis in original].[67] It includes information about a target collected through a variety of cyber and noncyber intelligence sources.[68] This is due to collection requirements against targets to plan and execute offensive operations. As Martin Libicki notes, the "notion that cyber-warriors can be assigned to any target on the fly may not be entirely the case. . . . This tenet understates how much intelligence preparation is required for a successful attack. Success at operational cyberwar depends to a great extent on knowing where the target is vulnerable."[69] The time and resource requirements for intelligence about a target may exceed by orders of magnitude those needed to conduct an operation—potentially at a ratio of 100 to 1.[70]

Intelligence collection is important not only prior to gaining access to a target's network or system (identifying vulnerabilities and developing exploits for them) but also oftentimes continues to play a role even after an actor has established a foothold in a network. Cyber weapons themselves may have built-in intelligence collection functions to gather information

about a target's network subsequent to penetration. This is because attackers must possess intimate knowledge of a network's structure and how components relate to one another—information that can often be gained only after breaching the network itself.[71] This requisite underscores a key distinction between two types of cyber operations—computer network exploitation (CNE) and computer network attack (CNA). While they both require exploiting a vulnerability to gain access to a target, CNE involves clandestinely gaining access to observe and exfiltrate private information while CNA entails delivering some kind of effect against data at rest or in transit (e.g., disrupt, degrade, destroy, etc.).[72] CNE, therefore, can be conducted to gather additional information as part of laying the groundwork for a forthcoming offensive operation.[73] For instance, an attacker might conduct an initial CNE operation to "map the network and make inferences about important and less important nodes on it simply by performing traffic analysis to determine what the organizational structure is and who holds positions of authority" for the purposes of identifying the key nodes to attack.[74]

Intelligence is vital at every step of an operation, from collecting information about the specifications of a target's network or system and identifying vulnerabilities to serve as a foothold for an attack, to developing means of access and the exploit itself. It is also costly and intensive. As Austin Long notes, "The intelligence requirements for cyber options are immense, as the delivery mechanism is entirely dependent on intelligence collection."[75] Laying the intelligence groundwork for an offensive cyber operation "can be extraordinarily difficult, even for advanced cyber actors."[76] This is because states typically secure the critical systems that might be targeted through cyber means (e.g., nuclear power plants, electrical grids, or water filtration systems) because of their importance to social and economic functioning and national security. Therefore, developers of cyber weapons must collect intelligence on a target that is likely to be well defended and not connected to the Internet, as well as have intimate knowledge of the specific information or operational technology on which a particular system was built, which is often customized and not publicly known. Developing a capability that can interface with a custom-built system is difficult, but it is by orders of magnitude more arduous to develop the mastery necessary to manipulate the system to do something that it may have been designed to resist—to understand, for instance, how complex processes relate to one another or to identify key nodes that could be targeted to produce cascading failures.

The above discussion illustrates not only the immense intelligence work that underlies offensive cyber operations but also its value. CNE operations enabling actors to maintain persistent, stealthy presence in a target and collect information have critical strategic utilities in terms of their contribution to a state's intelligence collection efforts for espionage purposes as well as their support of potential future military operations. Indeed, data collected on state-conducted cyber operations indicates that the overwhelming majority of these are for intelligence or espionage.[77] The strategic worth of cyber intelligence activities—which are also required to support offensive operations—demands that governments conduct intelligence gain/loss calculations when evaluating the potential upside of conducting offensive operations that may jeopardize cyber intelligence assets. The fact that cyber operations have alternative and sometimes competing strategic utilities can reduce the probability of escalation via cyber means contingent on how decision-makers rank these different utilities.

One counterargument to the effects of intelligence gain/loss calculations on decisions about escalation is that there may be situations when the interests at stake are sufficiently high to warrant prioritizing offensive action over preserving intelligence. In general, when stakes are high in both cyber and noncyber realms, we should expect the probability of escalation to increase. However, the strategic value of cyber-enabled intelligence collection activities for both espionage and military purposes is an important factor militating against escalatory decision-making that is not as salient in other domains.

Willingness to Engage in Cross-Domain Escalation

Just as the limited ability of offensive cyber operations to generate meaningful and sustained costs against a target reduces their appeal as tools of escalation, it also diminishes the likelihood of cross-domain escalatory responses to a cyber incident. Cyber operations can cause significant economic and, in some instances, second-order effects on human life (such as cyberattacks against a power grid). However, they have not yet produced the physical violence and horrors of kinetic warfare or even terrorism that would engender a visceral public reaction to prod decision-makers into escalatory responses—particularly responses that would cross a key threshold from cyber to kinetic force. In other words, both the tangible and psychological costs of cyber operations may check domestic political willingness (or pressure) to escalate via cross-domain instruments in response to adversary cyber operations.

A counterargument to this logic, similar to the discussion above regarding cost generation, is the notion that sharply distinguishing between acts that harm people and break things versus those that generate less tangible costs may be limited to certain types of states. Analogous recommendations to improve cyber CBMs to promote transparency and stability would mitigate risks stemming from differing conceptions of cost.

Implications for US Policy Making

The above analysis suggests several important implications for policy making, particularly for the United States. First, our analysis should not be construed to imply that there are no circumstances in which we might expect to observe significant and risky escalation between rivals in cyberspace. In fact, our analysis suggests that the leading dangers lie in circumstances where the interests at stake are high and at least one party to a rivalry seeks to escalate. In these cases, when the latter may lack ability to do so using cyber means for the manifold reasons outlined above, a state may be incentivized to default to cross-domain, kinetic responses that would engender risks of spirals into unwanted conflict. We would expect this particular circumstance to be relatively rare, given that it is unlikely that a single cyber incident would be sufficiently costly in itself to trigger this chain of decision-making. Nevertheless, the potential consequences of such a low-probability, high-consequent event suggests that an important next step for researchers and practitioners is to theorize about more specific scenarios—such as those before, during, or after a great power conflict— that might approach these thresholds and explore how to build de-escalation pathways tailored to them.

Second, there is a growing recognition that the United States has historically been overly self-restrained in its approach to countering adversary behavior in cyberspace. For instance, it has chosen to largely employ diplomatic and legal instruments of power to address Chinese theft of national security intelligence property or Russian cyber-enabled influence operations that erode confidence in fundamental US democratic institutions. The 2018 DOD Cyber Strategy reflects a shift in this approach to a posture that is more active and engaged.[78] If our analysis above is correct, it would imply that the United States can safely engage its adversaries in cyberspace more assertively without invariably provoking dangerous escalation dynamics, although campaign planning should consider and conduct risk assessments of the types of scenarios outlined above that may trigger unwanted escalation. The reportedly first operational application of the "defend forward" concept, the US Cyber Command

operation to temporarily take the Russian troll farm, the Internet Research Agency, offline in the days preceding the 2018 midterm elections, provides initial (albeit limited) evidence that the United States can engage adversaries more directly in cyberspace without provoking escalatory spirals.[79] Additional evidence over time will provide further corroboration in either direction of the hypotheses presented in this analysis.

Finally, beyond the escalation implications of "defending forward," our analysis highlights the limitations of cyber operations as independent tools of statecraft. To effectively alter the cost-benefit calculus of US adversaries, roll back existing adversary gains, and shape the future operating environment to better reflect US interests and values, policy makers should appreciate that cyber means are not a panacea for addressing cyber challenges. Any US strategy for cyberspace should incorporate the full range of instruments of power, particularly because the United States maintains an asymmetric advantage in noncyber instruments while facing peer and near-peer competitors in the cyber realm. Discerning how to integrate and apply cyber capabilities not only in conjunction with and in support of conventional military power, but also across the other instruments of power, represents a key imperative for policy makers in the current strategic environment and in a future possibly dominated by another great power conflict. ⬛

Notes

1. Lawrence J. Cavaiola, David C. Gompert, and Martin Libicki, "Cyber House Rules: On War, Retaliation and Escalation," *Survival: Global Politics and Strategy* 57, no. 1 (February–March 2015): 84–94; and Martin C. Libicki, *Crisis and Escalation in Cyberspace*, (Santa Monica, CA: RAND, 2012), 10, 93–97, 106–8, 114–19. In an earlier piece, Libicki also argues that the factors that distinguish the cyber domain from conventional ones make the former more escalatory, such as the uncertainty surrounding the effects of cyberattacks; the asymmetric nature of the vulnerability in the domain, which could prompt escalation to conventional kinetic attacks; and the greater credibility of retaliatory threats. See Martin C. Libicki, *Cyberdeterrence and Cyberwar* (Santa Monica, CA: RAND, 2009), 69–74. See also Roger Hurwitz, "Keeping Cool: Steps for Avoiding Conflict and Escalation in Cyberspace," *Georgetown Journal of International Affairs*, 2013–14, 17, https://pdfs.semanticscholar.org/89c6/170c26f6f5b6f56271b7e1ee82af3f4e5e41 .pdf; David C. Gompert and Martin Libicki, "Cyber Warfare and Sino-American Crisis Instability," *Survival: Global Politics and Strategy* 56, no. 4 (August–September 2014): 7–22; and Avery Goldstein, "First Things First: The Pressing Danger of Crisis Instability in U.S.–China Relations," *International Security* 37, no. 4 (2013): 49–89.

2. "Joint Statement for the Record to the Senate Armed Services Committee, Foreign Cyber Threats to the United States, The Honorable James R. Clapper, Director of National Intelligence, The Honorable Marcel Lettre, Undersecretary of Defense for Intelligence, Admiral Michael S. Rogers, USN, Commander, U.S. Cyber Command, Director, National Security Agency," 5 January 2017, https://www.scribd.com/.

3. For example, see Jason Healey, "The Cartwright Conjecture: The Deterrent Value and Escalatory Risks of Fearsome Cyber Capabilities," in *Bytes, Bombs, and Spies: The Strategic Dimensions of Offensive Cyber Operations,* eds. Herbert Lin and Amy Zegart (Washington, DC: Brooking Institute Press, 2019). In a keynote address, Healey has also claimed that conflict in cyberspace is "the most escalatory kind of conflict we have ever come across." Jason Healey (keynote address, CyberTalks, New York City, 8 September 2016). For a dissenting view, see Brandon Valeriano, Benjamin Jensen, and Ryan C. Maness in their book *Cyber Strategy: The Evolving Character of Power and Coercion* (Oxford: Oxford University Press, 2018) for a critique of the belief that cyberspace is escalatory.

4. Department of Defense, *Summary: Department of Defense Cyber Strategy 2018* (Washington, DC: Department of Defense, 2018), 1, https://media.defense.gov/2018/Sep/18/2002041658/-1/-1/1/CYBER_STRATEGY_SUMMARY_FINAL.PDF. For reactions to the strategy, see Max Smeets and Herbert Lin, "An Outcome-Based Analysis of U.S. Cyber Strategy of Persistence & Defend Forward," *Lawfare*, (blog), Lawfare Institute in cooperation with the Brookings Institution, 28 November 2018, https://www.lawfareblog.com/; and Brandon Valeriano and Benjamin Jensen, "The Myth of Cyber Offense: A Case for Restraint," Policy Analysis no. 862, Cato Institute, 15 January 2019, https://www.cato.org/.

5. Statement of Brandon Valeriano, PhD, Donald Bren Chair of Armed Politics, Marine Corps University, Reader in Digital Politics, Cardiff University, Adjunct Fellow of Cyber Security, Niskanen Center, "The International Cyber Conflict Threat Landscape," Cyber Threats Facing America, Testimony before the United States Senate Committee on Homeland Security and Government Affairs, 10 May 2017, https://www.hsgac.senate.gov/imo/media/doc/Testimony-Valeriano-2017-05-10-REVISED2.pdf. See also Valeriano, Jensen, and Maness, *Cyber Strategy*, 66, where the authors note that "while cyber incidents are increasing [between 2000 and 2014], this increase appears to be directly associated with espionage and disruption campaigns, not the more malicious degradation activities that many fear."

6. Valeriano, Jensen, and Maness, 76.

7. Erica D. Borghard and Jacquelyn Schneider, "Israel Responded to a Hamas Cyberattack with an Airstrike. That's Not Such a Big Deal," *The Washington Post*, 9 May 2019, https://www.washingtonpost.com/.

8. For seminal academic work on escalation see Herman Kahn, *On Escalation: Metaphors and Scenarios* (New Brunswick, NJ: Transaction Publishers, 2010); Richard Smoke, *War: Controlling Escalation* (Cambridge, MA: Harvard University Press, 1977); Barry R. Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Ithaca: Cornell University Press, 1991); and Bernard Brodie, *Escalation and the Nuclear Option* (Princeton: Princeton University Press, 1966).

9. Forrest E. Morgan, Karl Mueller, Evan S. Medeiros, Kevin L. Pollpeter, and Roger Cliff, *Dangerous Thresholds: Managing Escalation in the 21st Century* (Santa Monica, CA: RAND, 2008), 8, https://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG614.pdf.

10. Brodie, *Escalation*, 104.

11. Kahn, *On Escalation*, 23–24, 38; Thomas Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), chap. 3; Robert Jervis, "Cooperation under the Security Dilemma," *World Politics* 30, no. 2 (January 1978), 167–214; Posen, *Inadvertent Escalation;* Scott D. Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton: Princeton University Press, 1993); and Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).

12. Herbert Lin, "Escalation Dynamics and Conflict Termination in Cyberspace," *Strategic Studies Quarterly* 6, no. 3 (Fall 2012): 46–70, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-06_Issue-3/Lin.pdf.

13. William A. Owens, Kenneth W. Dam, and Herbert S. Lin, eds., *Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyberattack Capabilities* (Washington, DC: National Academies Press, 2009), 83–89. Zero days are the crown jewel of vulnerabilities. Zero days are vulnerabilities in hardware or software that exist "in the wild" and are unknown to defenders.

Therefore, patches have not yet been developed for them. Zero-day vulnerabilities are often revealed only after they have been exploited. Even then, it may take time for defenders to ascertain that a zero day was used.

14. For an additional discussion of access dependence, see Erica D. Borghard and Shawn W. Lonergan, "The Logic of Coercion in Cyberspace," *Security Studies* 26, no. 3 (May 2017): 452–81. While nearly all cyber weapons require exploiting some kind of vulnerability to gain access to a target and deliver an effect, there are some exceptions. Distributed denial-of-service (DDoS) attacks, for instance, do not require gaining access but, rather, produce disruptive effects by overwhelming the target's processing capacity (typically through jamming its bandwidth via the sheer volume of requests). However, at scale, the process of building large botnet armies to carry out DDoS attacks involves exploiting vulnerabilities in infected devices that are then harnessed as part of the botnet.

15. Chris Inglis, "Illuminating a New Domain: The Role and Nature of Military Intelligence, Surveillance, and Reconaissance in Cyberspace," in Lin and Zegart, *Bytes, Bombs, and Spies,* 25.

16. Jason Healey, "Claiming the Lost Cyber Heritage," *Strategic Studies Quarterly* 6, no. 3 (Fall 2012): 14, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-06_Issue-3/Healey.pdf.

17. Cost considers the resource requirements necessary to acquire access, risk includes physical as well strategic risks of different means of access, and reliability pertains to the likelihood of achieving a desired outcome.

18. A potential source of change is IT/OT convergence, which may reduce barriers to gaining access to OT networks and systems. See, for example, *IT/OT Convergence—Moving Digital Manufacturing Forward* ([San Jose, CA?]: Cisco, 2018), https://www.cisco.com/c/dam/en_us/solutions /industries/manufacturing/ITOT-convergence-whitepaper.pdf.

19. There are exceptions to each model. IT networks can indeed be closed and not connected to the open Internet, and OT networks can have access to the Internet. That said, OT networks having access to the open Internet are considered poor cybersecurity, and the convergence of the two networks is something most cybersecurity practitioners try to avoid. In one interesting study, Blake Rhoades et al. found maritime systems connected to the Internet. For further information see Jim Twist, Blake Rhoades, and Ernest Wong, "Navigating the Cyber Threats to the U.S. Maritime Transportation System," in *Maritime Cyber Security*, eds. Joseph DiRenzo III, Nicole K. Drumhiller, and Fred S. Roberts (Washington, DC: Westphalia Press, 2017), chap. 4.

20. From a network engineering perspective, networks are layered in what is termed the Open Systems Interconnection (OSI) model. There are seven layers in the OSI model, ranging from the application layer, which is closest to the end user. From a broad technical vantage point, the lower the level of access, the greater the control and persistence a potential cyber capability can have over a compromised system.

21. For our purposes, it is not theoretically necessary to distinguish between software and firmware, but it is important to note that, from a technical perspective, they are different. Firmware is a type of software placed in hardware and is responsible for controlling some of the hardware's basic functions. Like software, firmware can (and should, from a cybersecurity perspective) be updated.

22. Max Smeets, "A Matter of Time: On the Transitory Nature of Cyber Weapons," *Journal of Strategic Studies* 41, nos. 1–2 (2017): 18.

23. Other types of cyber weapons are more modular or can be used in roughly the same form (or quickly repurposed in a slightly different and new form) against a range of potential targets. Examples of the latter include the recent proliferation of "malware as a service" markets, where individual can pay to rent botnets that distribute malware or families of ransomware, such as the evolution from Petya to NotPetya. See Department of Homeland Security (DHS), *Malware Trends: Industrial Control Systems Emergency Response Team (ICS-CERT), Advanced Analytic Laboratory (AAL)*, white paper (Arlington, VA: DHS, National Cybersecurity and Communications Integrations Center, October 2016), 2, https://www.us-cert.gov/sites/default/files/documents /NCCIC_ICS-CERT_AAL_Malware_Trends_Paper_S508C.pdf.

24. Martin C. Libicki, "Second Acts in Cyberspace," in Lin and Zegart, *Bytes, Bombs, and Spies*, 133.

25. "Cyber-attack: US and UK Blame North Korea for WannaCry," BBC, 19 December 2017, https://www.bbc.com/.

26. Kim Zetter, "An Unprecedented Look at Stuxnet, the World's First Digital Weapon," Wired, 3 November 2014, https://www.wired.com/.

27. Steven Bellovin et al., "Limiting the Undesired Impact of Cyber Weapons: Technical Requirements and Policy Implications," in Lin and Zegart, *Bytes, Bombs, and Spies*, 269.

28. Herbert Lin, "Oft-Neglect Cost Drivers of Cyber Weapons," *Net Politics* (blog), Council on Foreign Relations, 14 December 2016, https://www.cfr.org/blog/oft-neglected-cost-drivers-cyber-weapons.

29. From a defensive/cybersecurity perspective, the pace of DevOps (a conjunction of "development"—building computer programs—and "operations"—testing those programs) in a dynamic and continuous process reflects the dynamism of the environment.

30. Libicki, "Second Acts in Cyberspace," 133.

31. For research on the lifecycle of zero-day exploits, see Lillian Ablon and Andy Bogart, *Zero Days, Thousands of Nights: The Life and Times of Zero-Day Vulnerabilities and Their Exploits* (Santa Monica, CA: RAND Corporation, 2017), https://www.rand.org/.

32. "New CNMF Initiative Shares Malware Samples with Cybersecurity Industry," US Cyber Command, 5 November 2018, https://www.cybercom.mil/.

33. Martin C. Libicki, "Second Acts in Cyberspace," 133. Also see Smeets, "A Matter of Time."

34. Within the US government, for example, there is a Vulnerabilities Equities Process (VEP) that articulates standards for when the government discloses information about zero-day vulnerabilities. See White House, "Vulnerabilities Equities Policy and Process for the United States Government," 15 November 2017, https://www.whitehouse.gov/sites/whitehouse.gov/files/images/External%20-%20Unclassified%20VEP%20Charter%20FINAL.PDF. Governments and other actors must balance tradeoffs between the public security goods associated with information-sharing about vulnerabilities (which would enhance the overall security of information technology networks and systems) and the potential national security/intelligence benefits that come with stockpiling zero days. It is important to note that there is considerable variation in the time it takes different organizations to patch vulnerabilities.

35. Scott Shane, Nicole Perlroth, and David E. Sanger, "Security Breach and Spilled Secrets Have Shaken the N.S.A. to Its Core," *The New York Times*, 12 November 2017, https://www.nytimes.com/2017/11/12/us/nsa-shadow-brokers.html.

36. Inglis, "Illuminating a New Domain," 29.

37. Austin Long, "A Cyber SIOP? Operational Considerations for Strategic Offensive Cyber Planning," in Lin and Zegart, *Bytes, Bombs, and Spies*, 120.

38. William T. Eliason, "An Interview with Paul M. Nakasone," *Joint Force Quarterly* 92 (1st Quarter 2019): 7–8, https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-92/jfq-92.pdf.

39. Department of Defense, Defense Science Board, *Task Force Report: Resilient Military Systems and the Advanced Cyber Threat* (Washington, DC: Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, January 2013), 49, https://apps.dtic.mil/dtic/tr/fulltext/u2/a569975.pdf.

40. Erica D. Borghard, "The 'Known Unknowns' of Russian Cyber Signaling," *Net Politics* (blog), Council on Foreign Relations, 2 April 2018, https://www.cfr.org/.

41. See Erik Gartzke, "The Myth of Cyberwar," *International Security* 38, no. 2 (Fall 2013): 41–73; and Thomas Rid, *Cyber War Will Not Take Place* (Oxford: Oxford University Press, 2013).

42. Herbert S. Lin, "Offensive Cyber Operations and the Use of Force," *Journal of National Security Law & Policy* 4, no. 63 (2010): 63, http://jnslp.com/wp-content/uploads/2010/08/06_Lin.pdf.

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45. Eric Talbot Jensen, "The Tallinn Manual 2.0: Highlights and Insights," *Georgetown Journal of International Law* 48, no. 3 (2017): 736, https://www.law.georgetown.edu/international-law-journal /wp-content/uploads/sites/21/2018/05/48-3-The-Tallinn-Manual-2.0.pdf.

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56. Herman Kahn, *On Escalation*, 218.

57. For more on cyber CBMs, see Erica D. Borghard and Shawn W. Lonergan, "Confidence Building Measures for the Cyber Domain," *Strategic Studies Quarterly* 12, no. 3 (Fall 2018): 10–49, https:// www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-12_Issue-3/Borghard-Lonergan.pdf.

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66. However, other sources of intelligence, such as human (HUMINT) and open-source (OSINT), can contribute to preparatory efforts.

67. Inglis, "Illuminating a New Domain," 24.

68. Matthew M. Hurley, "For and from Cyberspace: Conceptualizing Cyber Intelligence, Surveillance, and Reconaissance," *Air & Space Power Journal* 26, no. 6 (November–December 2012): 14, https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-26_Issue-6/F-Hurley.pdf.

69. Libicki, "Cyberdeterrence," 154.

70. Libicki, 155.

71. Bellovin et al., "Limiting the Undesired Impact of Cyber Weapons," 274.

72. Lin, "Offensive Cyber Operations," 63–64.

73. Andru E. Wall, "Demystifying the Title 10–Title 50 Debate: Distinguishing Military Operations, Intelligence Activities & Covert Action," *Harvard National Security Journal* 3, no. 1 (2011): 118–20, https://harvardnsj.org/wp-content/uploads/sites/13/2012/01/Vol-3-Wall.pdf.

74. Lin, "Offensive Cyber Operations," 69.

75. Long, "Cyber SIOP," 117.

76. Long, 117.

77. The Council on Foreign Relations Cyber Operations tracker identifies 290 distinct cyber operations that occurred from 2005 to 2018 as of 12 February 2019; see https://www.cfr.org/interactive/cyber-operations. Cyber activity encompasses a range of actions, including DDoS attacks, espio-

nage, defacement, data destruction, sabotage, and doxing. Of these, there are 8 cases of data destruction, 4 of defacement, 16 of DDoS, 4 of doxing, 237 of espionage, and 16 of sabotage; the remaining 5 are uncategorized in the data but, according to the descriptions, are additional instances of espionage. Similarly, Brandon Valeriano and Ryan Maness's Dyadic Cyber Incident Dataset (ver. 1.1) identifies 192 cyber incidents between 2000 and 2014. They code the incidents according to different types: vandalism, DDoS, intrusion, and infiltration. Intrusions are equivalent to the CFR's coding of espionage. In this dataset, there are 31 cases of vandalism, 33 of DDoS, 88 of intrusion (espionage), and 40 of infiltration.

78. For an excellent discussion of the evolution of US cyber strategy, see Jacquelyn G. Schneider, "Persistent Engagement: Foundation, Evolution and Evaluation of a Strategy," *Lawfare* (blog), Lawfare Institute in cooperation with the Brookings Institution, 10 May 2019, https://www.lawfareblog.com/.

79. Erica D. Borghard, "What a U.S. Operation against Russian Trolls Predicts about Escalation in Cyberspace," War on the Rocks, 22 March 2019, https://warontherocks.com/.

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Strategic Cyber Deterrence: The Active Cyber Defense Option by Scott Jasper. Rowman & Littlefield, 2017, 255 pp.

The book *Strategic Cyber Deterrence: The Active Cyber Option* is particularly relevant today in the face of the continuing challenges for America from the Russians, Chinese, Iranians, and North Koreans. While many feel that cyber deterrence is unattainable, Professor Scott Jasper of the Naval Postgraduate School shows quite clearly that we can in fact get there if we open our intellectual aperture. This subject is of ever-increasing relevance to the physical and digital security of the nation, as well as to America's wider national interests. It is tough ground to cover, filled with a great deal of technical information and international relations jargon, but it is a needful task and worth the intellectual effort.

Jasper has structured the book logically into three parts. He begins with a section of solid introductory material covering the main theoretical areas that must be understood to address deterrence. "Strategic Landscape" (chapter 1) covers all the preliminary concepts. It is heavy but understandable. The next two chapters ("Cyber Attacks" and "Theoretical Foundations") expand on the concepts introduced in the first and will satisfy those who may think chapter 1 covered too much ground, too fast.

In Part II, "Traditional Deterrence Strategies," chapters 4–6 form an excellent primer on deterrence. Jasper categorizes deterrence three ways: retaliation, denial, and entanglement. Respectively, he defines each of these terms to mean deterrence because your opponent is worried about the backlash, deterrence because the opponent's efforts will have no effect, and deterrence because the opposing system and your own are so intertwined that hostile attack becomes self-defeating. For readers with a scholastic background in deterrence, these three chapters are classic treatments and can be covered quickly. For other readers, this section offers solid background information and is well worth reading to grasp critical concepts.

Jasper finishes the book by investigating an active cyber defense strategy (chapters 7 and 8): what it is; what it is not; why it can work; and why it may be our only real, effective choice when considering alternative strategies.

The book has many strengths. First, it is loaded with understandable definitions—especially helpful with terms that are typically misused or at least misunderstood. That alone would make it worth reading. Second, it challenges the intellectual status quo without dismissing traditional thought. He gives the traditional deterrence theories a fair look. Doing so gives great balance and credibility to his later arguments. Finally, his alternative, an active cyber defense, is presented rationally and without the zealotry. Remaining scholarly and objective, Jasper shows the potential advantages and liabilities of the solution.

There are weaknesses to *Strategic Cyber Deterrence*. Primary of these is that a non-expert could get lost in the strategic and technical jargon. Jasper tries to avoid this, but cyber and deterrence are impossible to discuss without their associated vocabularies, and mixing them creates difficulty. Additionally, he seems to spend too much time setting the stage in the first six chapters. However, Jasper covers those areas much better than most academics, and another reader may have more patience.

Reading this book is well worth the effort. While not a summer beach page-turner, it is a well written, accessible volume providing a superb reference for those involved or interested in this key national security debate. Active cyber defense is the way forward to achieve deterrence and to guide response. What we have now is simply not enough. Jasper gets away from the view that active measures will turn the Internet into the Wild West, filled with vigilantes. He shows how an active defense policy can work and that it really is the most viable option. If one reads only the excellent chapter 7 on the active cyber defense option (and the appendix on the national strategy agenda), it would justify

the cost of the book and the time spent in reading. This chapter is insightful and enormously persuasive.

Every expert in the cyber field should read this book and consider Jasper's cogent arguments. Every legislator who wants to propose legislation to "solve" the cyber problem needs this book to become adequately literate in this crucial area. Every pundit who wants to break the next big cyber story should read it to avoid distortions and false reporting. Any civilian who wants a glimpse of the present and the future of our security world should also invest the time.

Scott Jasper has written a compelling work and should be congratulated for a fine book.

Stephen Bucci
The Heritage Foundation

The Logic of American Nuclear Strategy: Why Strategic Superiority Matters by Matthew Kroenig. Oxford University Press, 2018, 280 pp.

In 1984 Robert Jervis published a wide-ranging critique of American nuclear strategy entitled *The Illogic of American Nuclear Strategy*, in which he argued that much of the thinking by nuclear strategists and decision makers within the US federal government had, over the previous decades, been based on a flawed understanding of the nature of both nuclear deterrence and strategic stability. He suggested that the United States need only possess the ability to retaliate against the Soviets to deter them from launching a surprise attack on the United States or its allies. Any capability in excess of this was unnecessary and, even more problematically, destabilizing.

For both Thomas Schelling and Jervis, threats issued by a state with a numerical inferiority could also be viewed as equivalently credible, if not more so, than those issued by a state with a larger and thus more destructive capability if the stakes involved were greater for the numerically inferior state. Matthew Kroenig's recently released work *The Logic of American Nuclear Strategy* is in many ways a direct rebuttal to Jervis, Schelling, and the many scholarly works published since that echo these sentiments. In it, he lays out a detailed argument as to why such an approach is at best incomplete, if not wholly misguided.

Kroenig begins by reviewing the classic logic of the brinkmanship game, which suggests that each state in a two-player game possesses a second-strike capability, any additional capability should not affect the outcome. If both sides escalate to nuclear war, each player in the game is affected equally (destruction). The "winner" is thus determined not by whether one possesses more or less capability but by which one is more resolute and/or risk acceptant. Kroenig smartly points out, as he has in previous scholarship, that it is obviously not the case that two states with drastically different sized nuclear arsenals would suffer in the same way in such a situation. Were such an exchange to occur between the United States and China, for example, the comparatively small size of the Chinese nuclear force combined with the United States' ability to destroy much of the Chinese nuclear arsenal before its use would virtually guarantee a US victory.

To reflect this dynamic, Kroenig offers his "superiority-brinkmanship synthesis theory," which suggests that states with a superior destructive capability have a distinct advantage in crisis bargaining situations because the potential cost of escalating to nuclear war is less for them than it is for those with a numerically inferior force.

He tests the strength of this theory using both qualitative and quantitative analyses and finds that nuclear superiority bolsters both deterrence and coercion. Furthermore, he finds that the scale of these effects increases as the disparity in capability between

the two parties in a nuclear crisis increases (a rather troubling conclusion for those interested in nuclear disarmament).

The second part of the book not only attempts to dispel the conventional wisdom that nuclear superiority is inherently destabilizing but also challenges the prevailing logic of the stabilizing influence of nuclear parity. Nuclear parity, he points out, was always considered tenuous because it relied on "mutual vulnerability" between adversaries. If either side in such a relationship ever felt that its adversary possessed or was developing a first-strike capability, the other side might be incentivized to preemptively strike or else risk losing the ability to respond. As a result, there were strong pressures on both sides to guarantee the ability to conduct a retaliatory strike. However, Kroenig argues that situations where preponderances of capability exist are not subject to such tenuous circumstances; it is much clearer at the outset of a nuclear crisis who the likely victor would be, regardless of who launches first or second. Thus, this kind of situation is inherently more stable than one in which parity exists. Kroenig further argues that many of the most often cited instability-inducing byproducts of nuclear superiority, including arms races and nuclear proliferation, are wholly unsupported by the empirical record.

Certain criticisms can be leveled at this book—including the brevity of the case studies and reliance on a dataset that Kroenig himself views as inherently flawed. Furthermore, chapter 2 appears least significant since its sole purpose is to empirically support the assertion that if a state has more or bigger bombs than an adversary it can inflict more damage than said adversary (hypothesis 1). Perhaps the most interesting aspect of this book is the questions it raises for both scholars and the strategic-planning community, the most obvious of which is why academics and those involved in US nuclear planning have been so at odds for so long. If Kroenig is correct that preponderances of nuclear capability create more stable relationships than those where capabilities are roughly equivalent, why is it that the opposite conventional wisdom among academics remains prevalent? One might wonder, for instance, whether it is more ideology than strategy.

While the academic community has been almost monotheistic in its reverence for the concepts associated with parity, including the oft-cited doctrine of mutually assured destruction (MAD), the US nuclear planning community has, by and large, endeavored to create the situation Kroenig advocates. MAD, as many have pointed out, was never a doctrine to adhere to but rather an unfortunate reality to be dealt with. If given the choice between parity or US numerical superiority over all potential adversaries, it is hard to imagine that even the most reverential of MAD supporters would choose the former over the latter.

Overall, this book is a noteworthy and necessary contribution to the renewed debate on the utility and appropriate constitution of the US nuclear arsenal. Kroenig's preference for US strategic superiority seems to be echoed by the current presidential administration, a sharp departure from the past eight years. It will thus be interesting to see whether or to what extent his arguments filter into the narrative crafted by the administration to justify current and planned efforts toward force modernization. This volume may come to define the US approach to nuclear strategy for the foreseeable future—in which case, one can only hope that his assertions are correct.

<div align="right">

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China's Future by David Shambaugh. Polity Press, 2016, 203 pp.

Amid an assertive and expansionist China, there lies a question about the future of Beijing. David Shambaugh has introduced us to four possible pathways for China's

future—neo-totalitarianism, hard authoritarianism, soft authoritarianism, and semi-democracy. According to Shambaugh, if Beijing stays on the current path (hard authoritarianism), it would eventually lead to stagnation and even stall the economic development, leading to a further increase of social problems and eventually the political decline of the Chinese Communist Party (CCP). The author provides hard data to support his description of the prevailing economic situation at hand and also concludes that the deteriorating condition might even lurch China backward in the direction of neo-totalitarianism. Shambaugh reaffirms his argument with Minxin Pei's observation that without fundamental and far-reaching political reforms, China's economy would stagnate and the regime may well collapse. He equates the postcommunist authoritarianism phase that afflicted the Soviet Union and Eastern Europe with China's current dilemma. His view diverges from the general understanding of scholars like Zbigniew Brzezinski (1989) who claims in his book *The Grand Failure* that China was immune to the processes of the middle-income trap that affected newly industrialized economies. The author goes on to identify and describe the political, economic, and social variables that are questioning and shaping China's future.

The first chapter begins with the image of political efficacy and legitimacy that the ruling CCP regime has portrayed. The author believes that the image is strong but misleading. However, the image has been further bolstered after the 19th National Congress of the Communist Party of China, where Xi Jinping was elevated to the level of Mao Zedong after his political doctrine "Xi Jinping Thought on Socialism with Chinese Characteristics in a New Era" was enshrined in the constitution. The author describes the economic variable of innovation as central to China's economic future. According to Shambaugh's estimates, 282 percent of the GDP is the total debt that China is burdened with. There is also a decline in foreign inbound investment as costs are increasing and operations are becoming more difficult for foreign multinational companies in China. Key social or domestic factors include the government's repression of civil society, the growing aspirations of a burgeoning middle class that is expected to fuel social inequality, and class resentment as the affluent populace is set to rise drastically. Cases of corruption have also been reported to be continuing despite the regime's anti-corruption campaign.

In the second chapter, David Shambaugh takes great effort in bringing factual data and figures to portray the failing economic conditions of China as a hard-authoritarian state. He describes the middle-income trap wherein he quotes former Chinese finance minister Lou Jiwei in 2016, stating, "China had a 50-50 chance of falling into this trap." However, in 2018, Lou changed his position as he claimed that China was undergoing reforms and would become a high-income country in three to five years. This chapter also details the economic variables shaping China's future. Shambaugh quotes figures from mid-2014 and gives empirical evidence of ghost cities to highlight the peak and decline of the property market bubble in several cities due to oversupply and inflated prices for commercial and residential units, while land sales were said to be declining nationwide. There is a sense of financial repression, and shadow banking has been estimated to have grown to $5.2 trillion or 21 percent of GDP. According to Shambaugh, the state needs to divest itself of excessive control of the banks and give way to market mechanisms. In Paul Krugman's words, China has been pumping up demand by force-feeding the system with credit, including a fostering stock market boom. He posits that Chinese consumers can drive the next wave of economic growth if retirement, healthcare, and old age provisions can be ameliorated. Shambaugh has interlinked the need for innovation to accomplish overall macro-economic transition toward a thoroughly modern society and economy. However, even innovation needs a fundamental educational system premised on critical thinking and freedom of exploration. This is perhaps

the most improbable step that China as a surveillance state could adopt. It brings us to the question of whether political liberalization is necessary for broad-based innovation in society and, moreover, whether this liberalization of politics will necessarily drive China's economic future.

The author traces the profound transformation experienced by China as one that no other society in history has experienced. It began with the era of Deng Xiaoping's "to get rich is fabulous," with Chinese urbanites possessing the "four rounds" (bicycle, wristwatch, sewing machine, and washing machine") and "three electrics" (television, refrigerator, and private telephone). Now China has the most millionaires and second-largest number of billionaires. There is also widening class differentiation with many whose lives have not improved as rapidly as others. The world Gini coefficient rankings indicate that China is one of the top ten, supporting the argument of increasing social inequality in China. China has reportedly already experienced 200,000 dispersed incidents of mass unrest every year. Even if there was massive unrest, it seems more likely to be diffused as quickly as it began, with China having spent more from its budget on internal security than its military as part of the government's stability maintenance activities. The author is convinced that Tibet, Xinjiang, Taiwan, and Hong Kong could explode into full-scale civil disobedience and anti-regime activities. A particular methodology adopted by China to try to control the external triggers of mass unrest that comes to mind is Beijing's tacit support to the deep state of Pakistan to prevent the extremist elements of Islamic terrorists from making inroads into the Xinjiang region. The recent push from the legislative council of Hong Kong for the extradition bill brought Hong Kong to a standstill as it witnessed its largest-ever public rally of over two million protestors. This episode may signal the limits of Beijing's extensive oversight of Hong Kong's political system under the "one country, two systems" model.

In one of his suggestions for overhauling Chinese educational institutions, the author advocates an emphasis on Western-style individualized learning, independent and critical thinking, basic inroads of applied research, and hypothesis-based analysis; otherwise, he indicates, Chinese universities will continue to be "mediocre." This viewpoint is rather more self-aggrandizing and translates into the default notion of how the West portrays itself and its systems as the only alternative. The author also makes sweeping observations that publications in Chinese journals lack originality or the widely favored peer review. In a paper shared by the Social Science Research Network, findings show academic in-group bias in some journals toward publishing papers by faculty from their home institutions. The study tracked Web of Science and Google citation data for articles published in *International Security*, housed at Harvard University and published by MIT Press, and *World Politics*, housed at Princeton University and published by Cambridge University Press. The other two journals without institutional affiliations are *International Organization* and *International Studies Quarterly*. Of note, according to the QS world university rankings, five universities from China alone occupy the top 50 ranks, with Tsinghua and Peking Universities occupying the 9th and 20th ranks for 2019.

For environment and ecological debates, scientific findings have many times highlighted the worsening conditions of air quality in China's major cities. Indeed, rapid industrialization has drastically affected natural resources, the climate, and air, but this issue is pertinent globally. As far as greenhouse gas (GHG) emissions are concerned, it is in the best interest of all countries to achieve a balance. However, for developing countries, peaking of GHG emissions will take longer, and its reduction hinges on equity, sustainable development, and eradication of poverty.

In the fourth chapter, the author deals with how well China's party-state addresses a broad range of economic and social challenges outlined. He describes the era of liberal neo-authoritarianism after the Cultural Revolution and deaths of Mao, Deng Xiaoping,

and Hua. The Tiananmen Square incident in 1989 quelled all liberal approach to political reform in China. There was a reversion of approach to a totalitarian rule from 1989 to 1992. The author emphasizes how Xi's regime viewed politics as zero-sum, sharing power and that empowering other civic actors is considered detrimental to the system. Shambaugh brings caution to the two-term limit that constrains Xi Jinping, but with the National Party Congress removing the term limits, Xi Jinping would be ruler for life. Shambaugh's hypothesis of Xi maneuvering to extend his stay has proven correct. Perhaps the author sees what we are unable to observe as he illuminates the failure of the Internet and social media, the defection of officials abroad, splits in the military and internal security services, elite factionalism, and pushback from intellectuals and other dissident activities as reasons for a Chinese state of atrophy and inexorable decline. According to the author's theory, there has been significant factionalism and pushback from intellectuals even among the Trump administration. However, it is hard to say if the United States is willing to accept this as a sign of atrophy and decline as well.

Shambaugh attempts to draw a conclusion out of his analysis and ends up suggesting the best approach that China should undertake to prevent an impending collapse. He warns that the Sino-Japan relations embedded in rivalry will continue and lead to Asia becoming strategically unstable. China developed into the largest trading partner of every Asian country, leading to economic interconnectivity that has become difficult to counter. Beijing's military modernization pace and rapidly expanding naval presence are further causes of concern. Beijing is more emboldened about its strategic targets of near seas and far seas as depicted in China's 2015 Defense White Paper. The growing discontentment between China and the United States is being considered a "new normal." The author opines that China's comprehensive power still lags considerably as compared to the United States. He had predicted that whoever became the 45th US president would bring about qualitatively firm American policy toward China. He advocates the semi-democratic pathway to be the best alternative for China to become more respectful and adherent to the full body of norms embedded within global liberal institutions.

At first, the author guides the reader toward the possible pathways China is likely to end up with among the four choices given if it continues on its trajectory or chooses to implement a new wave of transformational reforms. Toward the end, the reader gets a selective perspective that the pathway should be soft authoritarianism or semi-democracy if China is to develop and prosper. However, at this juncture of hard authoritarianism, China is likely to stay the course without climbing down to a softer version of its political nature. Whether this current course would eventually lead to stagnation, an increase of social problems, and the political decline of the CCP is still difficult to ascertain as China continues to grow in strength—or at least manages to showcase a convincing image. This book is an excellent addition to the reading list of upcoming scholars and experts trying to get a swift but insightful assessment of the complex polity and stealthy economics undertaken by the Chinese leadership and its implication for the country's future trajectory. The arguments are well developed except for the fact that the age-old notion of Western civilization as the only modern alternative is overstated.

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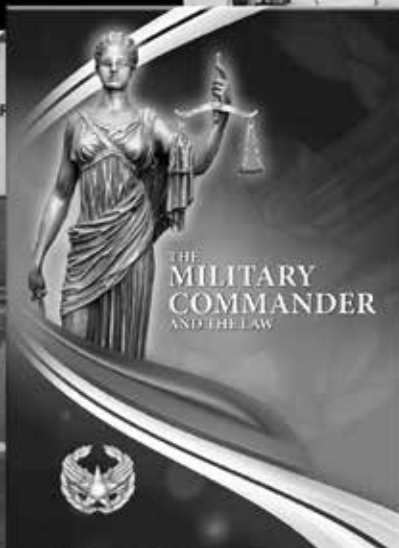
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