

The Common Sense of Small Nuclear Arsenals

James Wood Forsyth Jr.

Common sense is not what we put into the world. It is what we find there.

—Jacob Bronowski

With the publication of President Obama's security strategy, entitled *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, it appears US policymakers are interested in reducing the size of America's nuclear arsenal.¹ This seems to make sense. Reducing the number of nuclear weapons in the world has been part of the American security agenda for some time. Interestingly, as the United States seeks yet another round of nuclear arms reductions, the number of states with small nuclear arsenals has risen, albeit slowly, throughout the world. As of 2010, nine states possessed nuclear weapons. The United States and Russia each has thousands, with estimates running as high as 20,000 between them. The remaining seven states share a combined total of approximately 1,000.² In this regard, the United States and Russia appear to be out of line with the rest of the world; small nuclear arsenals, not large ones, are the global norm. As the United States contemplates a change in its nuclear posture, might a new epoch in the evolution of nuclear history and strategy be emerging? Has the age of small nuclear arsenals truly arrived?³

Small nuclear arsenals are not new, per se. For a variety of reasons, France developed a small, independent nuclear arsenal after World War II.⁴ It kept its force levels comparatively low, even during the Cold War when the arms buildup in the Soviet Union would have seemed to threaten its very existence. France's behavior is not unusual, however. The majority of states with nuclear arsenals have opted to keep them relatively small; they have not acquired large numbers of nuclear weapons, as was the habit of the superpowers during the Cold War. Instead, these states seem content

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with a small force capable of warding off an attack as well as dissuading others from interfering in their internal and external affairs. That pattern is continuing and, therefore, is worth examining.

In this article I use structural theory to explain what I call “the common sense of small nuclear arsenals.” The central claim advanced here is that small numbers of nuclear weapons seem to socialize leaders to the dangers of adventurism and, in effect, halt them from behaving recklessly or responding recklessly to provocation.⁵ This is a bold and somewhat dangerous claim, so it is important to elaborate the argument. Like many, I believe nuclear weapons are here to stay for the foreseeable future, however regrettable that might be, and I make no claims about the durability of deterrence. Deterrence may indeed fail one day, but if it does, it will not be because leaders are insensitive to the punishments they face should they choose to use a nuclear weapon. If leaders were insensitive to punishment, deterrence would not work at all. Furthermore, mine is a state-centric argument. Why? States remain, for better or worse, the most important actors in international politics. That is not to say they are the only actors. Clearly, they are not. But should the day come when a nonstate actor obtains a nuclear weapon, it will, in all likelihood, be provided by someone connected to a state.

I begin the argument by examining the dynamics of deterrence and dissuasion and then explain small nuclear arsenals in terms of structural theory, relying most heavily on the effects of socialization. Lastly, I outline some concerns for policymakers.

The Dynamics of Deterrence and Dissuasion

Nuclear weapons, more so than any other, “hold power at bay,” as Bernard Brodie so aptly put it.⁶ In what remains one of the most quoted statements in the field of national security studies, Brodie summarized the message of his book *The Absolute Weapon* with these words: “Thus far, the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them. It can have no other useful purpose.”⁷ As a RAND analyst, Brodie would develop a deep understanding of nuclear weapons and their destructive potentialities. For illustrative purposes, this cannot be overstated: one 300-kiloton weapon is more than enough to destroy a city the size of London. If a bomb of that size were detonated above Trafalgar Square on a workday,

approximately 240,000 people would die instantly, and 410,000 casualties would be sustained. Nearly everything within a 3-km radius would be destroyed, with burn victims reaching out as far as Victoria Park. The same bomb detonated above Mumbai on a workday would kill over one million people and produce more than two million casualties.⁸ Even if one were to assume the worst, a “bolt from the blue” in which a state lost 50 percent of its nuclear capability to a first strike, a relatively small force of even 100 weapons would allow that state to strike back over 50 times before it had to negotiate.⁹ Common sense would tell us that few states, if any, could withstand that sort of punishment, and even fewer leaders would run that sort of risk. Nonetheless, as deterrence strategy evolved, discussions often focused on the idea that it was difficult to achieve.¹⁰

In the Eisenhower years, “massive retaliation” was the phrase used to describe how America would respond to a Soviet attack. Certainly, deterrence must have been presumed to be difficult if one had to threaten to respond massively to achieve it. As the Soviet arsenal grew, MAD (mutually assured destruction) became the acronym for the notion that deterrence depended upon the capability and the will to destroy a country. Beginning in the 1960s, assured destruction became the emphasis, and the policy became something of a two-headed monster. Not only was deterrence difficult to achieve, but the thought it might fail made the very attempt to achieve it doubly dangerous. Henry Kissinger made this plain when he counseled European allies not to keep “asking us to multiply strategic assurances that we cannot possibly mean or if we do mean, we should not want to execute, because if we execute, we risk the destruction of civilization.”¹¹

Throughout the Cold War the idea that deterrence was difficult cast a long shadow. But as the Cold War evolved, so, too, did analysts’ thinking.¹² When the Eisenhower administration introduced its New Look policy in January of 1954, John Foster Dulles left the world with the impression that aggression anywhere would elicit heavy nuclear retaliation. Just three months later, he amended that policy. To deter major aggression, Dulles thought, “the probable hurt” only needs to “outbalance the probable gain.”¹³ In the 1960s, the Kennedy administration recognized both the need for a secure retaliatory capability and the fact that the services desired to purchase capabilities far in excess of that need.¹⁴ It therefore sought to program capabilities that would be invulnerable to a counterforce strike and would be able to inflict unacceptable damage on the Soviet

Union—but no more.¹⁵ Looking back, Secretary of Defense McNamara had this to say:

Our goal was to ensure that [the Soviets], with their theoretical capacity to reach such a first-strike capability, would not outdistance us. But they could not read our intentions with any greater accuracy than we could read theirs. The result has been that we have both built up our forces to a point that far exceeds a credible second-strike capability against the forces we each started with. In doing so neither of us has reached a first-strike capability.¹⁶

In other words, both sides were deterred fairly early on, even though that may not have been the intention.

Similarly, reflecting on what he learned from the Cuban missile crisis, Kissinger remarked that the Soviet Union had only “60–70 truly strategic warheads while we had something like 2,000 in missiles and bombs. . . . [But] with some proportion of Soviet delivery vehicles surviving, the Soviet Union could do horrendous damage to the United States.”¹⁷ Since there was no way to ensure our force of 2,000 could destroy their smaller force of 60 or 70, the crisis exemplified how a small force could inhibit the use of a large one. Along these lines, National Security Advisor McGeorge Bundy concluded, “A decision that would bring even one hydrogen bomb on one city of one’s own country would be recognized in advance as a catastrophic blunder; ten bombs on ten cities would be a disaster beyond history; and a hundred bombs on a hundred cities are [*sic*] unthinkable.”¹⁸

Whatever its logical shortcomings, it is important to stress that deterrence worked—it kept the Cold War “cold” and allowed international life to go on without a catastrophic nuclear war. After 70 years, most analysts agree on the basic dynamics of deterrence, and the contemporary debate regarding deterrence, when not addressing the problem of nonstate actors, tends to pivot on force structure considerations.¹⁹ Here, the behavior of states with small nuclear arsenals is instructive. As previously mentioned, most states with nuclear arsenals have not acquired large numbers of nuclear weapons. Instead, they appear content with a relatively small arsenal capable of warding off an attack as well as dissuading others from interfering in their internal and external affairs. But of the two roles nuclear weapons seem to play—deterrence and dissuasion—is one more important than another? For India and Pakistan, nuclear weapons play a decidedly deterrent role. But if one were to free Britain of its NATO obligations, who exactly would Britain be deterring today? What about France? Neither of these countries is as hard-pressed in the security arena as India or Pakistan,

yet both hold on to nuclear weapons. While nuclear weapons still “hold power at bay,” one must wonder whose power is being held at bay and how.

It is important not to overinterpret this. Nuclear weapons serve a purpose. How else can one explain why nine states have them, while others appear to want them? But what purpose do they serve, in general? To answer that question, one must look at what nuclear weapons do for states. Among other things, nuclear weapons socialize leaders to the dangers of adventurism and, in effect, halt them from behaving or responding recklessly to provocation.²⁰ Statesmen may not want to be part of an international system that constrains them, but that is the system that results among nuclear powers. Each is socialized to the capabilities of the other, and the relationship that emerges is one tempered by caution despite the composition, goals, or desires of its leaders. In short, nuclear weapons deter *and* dissuade.

Dissuasion is not a new term, but it is one that lacks specificity. The use of the term here stems from the work of Patrick Morgan, whose thoughts on general deterrence are particularly useful. Dissuasion and general deterrence share many common elements. Both are rooted in deterrence theory and share an emphasis on uncertainty and ambiguity. Like general deterrence, dissuasion is “complicated and ambiguous, hard to analyze.” Because it is amorphous, theorizing about general deterrence has been difficult. The same can be said for dissuasion.²¹ But deterrence and dissuasion are not two sides of the same coin; they differ in a number of important respects.

Deterrence involves “setting the stage—by announcement, by rigging the tripwire, by incurring the obligation—and waiting. The stage-setting can be non-intrusive, non-hostile, and non-provocative, but the act to be deterred is always intrusive, hostile, and provocative. The deterrent threat changes the consequences only if the act in question—the one being deterred—is then taken.”²² Dissuasion need not be announced; there are no tripwires or obligations, no waiting or threats. Dissuasion does not change the consequences of a specific act in question but does, through socialization, change the nature of state relations. Deterrence is specific; dissuasion is more general. For deterrence to work, one “must dig in or lay a mine field.”²³ For dissuasion to take hold, one need only possess mines, albeit nuclear ones. In this regard, the pursuit of power to deter *and* dissuade marks a difference in relations among nuclear powers today. The relationship among China, Russia, and the United States is instructive.

China's nuclear numbers remain puny compared with those of Russia and the United States. Yet, despite these large nuclear inequities, China continues to modernize its conventional and nuclear capabilities, extending its influence throughout the region. How does one explain this behavior? Apparently, China has reasoned that its small nuclear arsenal is sufficient to socialize rivals to the dangers of war. There is little that Russia or the United States can do militarily to prevent China from pursuing its armament programs or vice versa. The presence of even a small number of nuclear weapons makes talk of war reckless, so leaders on all sides try to avoid it. Yet, it would be a mistake to suggest that China is actively deterring the United States or Russia in the same manner that the superpowers deterred one another during the Cold War. Instead, it might be more precise to conclude that the three countries have tacitly entered into a period of mutual dissuasion; nothing official has been declared, but all know the stakes are too high for anyone to engage the other militarily. If leaders in China, Russia, and the United States understand this, others do as well, which is why the slow spread of small nuclear arsenals (i.e., nuclear proliferation) is likely to continue.

Why Numbers Don't Count

Strategists have long recognized that throwing more men and weapons into battle may increase the carnage but not necessarily procure victory. The same holds true with nuclear numbers. Simply put, large arsenals buy statesmen little. This presupposes that statesmen are not sensitive to the actual number of nuclear weapons a state may possess; they are sensitive to whether or not it has one at all. The mere fact that a state may have a nuclear weapon or seek to acquire one seems to be sufficient to condition statesmen to act cautiously. As Steven Walt aptly put it, American policymakers understand this logic, or "they would not be so worried when a state like North Korea or Iran makes a move to join the nuclear club."²⁴ This begs the question, How many nuclear weapons do states need to achieve relative security? That is a big question for which there is, theoretically, a small solution: an arsenal that an adversary might be able to take out with a first strike and one it knows it cannot. Since deterrence holds as a result of a viable second-strike capability, the capability to dissuade need not be large.²⁵

But suppose an adversary were contemplating a first strike. What do you believe the second question put to the leader would be? It might be, And which city of ours are we willing to give up in exchange? The example is illustrative for two reasons. First, strategy is not contingent upon just the first move but also the following ones.²⁶ Second, in high-stakes games like nuclear war, second- or third-round moves are riddled with danger, so everything turns on preventing the first move, which makes the game relatively easy to understand and simpler to play. Moreover, leaders socialized to the dangers of nuclear weapons seem to understand that while numbers count, a small number of nuclear weapons are more than enough to dissuade the staunchest of rivals, even ones with comparably large nuclear numbers. Again, China's behavior is instructive.

As mentioned, China's nuclear numbers remain relatively small compared to those of the United States and Russia—approximately 400 nuclear weapons, with about 200 operationally deployed. China most likely possesses 30 intercontinental ballistic missiles (ICBM) capable of striking the continental United States and about 10 capable of striking Hawaii and Alaska. It also possesses roughly 100 intermediate-range weapons capable of striking US bases, friends, and allies in the Pacific region.²⁷ In contrast, the United States possesses approximately 450 ICBMs, each capable of carrying one to three warheads; 14 Trident submarines, each equipped with 24 submarine-launched ballistic missiles (SLBM) that carry as many as eight warheads each; and 100 or so nuclear bombers capable of carrying a variety of payloads to include air-launched cruise missiles (ALCM).²⁸ For illustrative purposes, let us assume Russia has a similar mix. As previously mentioned, despite these rather large nuclear inequities, China continues to modernize its conventional and nuclear capabilities, extending its influence throughout the region.

China behaves as if its small nuclear arsenal is sufficient to dissuade rivals. In international politics, dissuasion restrains states from acting externally but affords opportunities to act internally, allowing China to pursue whatever weapons it chooses. Shrewd states recognize this as well as the fact that large nuclear arsenals have a diminishing return. There seems to be little the United States or Russia can do militarily to prevent China from pursuing its armament program. This is not the same as saying that nothing can be done to influence China's policies. China's economic, diplomatic, and military policies can be influenced by the coordinated economic, diplomatic, and military policies of the United States and

Russia, but China's military designs are secured by its relatively small nuclear arsenal.²⁹

Socialization, Nuclear Weapons, and Structural Theory

Since the advent of nuclear weapons, there have been few wars among nuclear states. That is not the same as saying nuclear powers do not quarrel, threaten, or even fight proxy wars against one another—they do. But nuclear states rarely, if ever, fight wars against one another. Why? As previously mentioned, nuclear weapons seem to socialize leaders to the dangers of adventurism and, in effect, halt them from behaving recklessly. In short, the risk of nuclear war makes leaders risk-averse; they must act with deliberate restraint, carefully plotting their courses of action in terms of how other nuclear leaders might react, even if they would prefer not to. Along with the “democratic peace” theory—which has been touted as the closest thing we have to an empirical law of international behavior—the “long peace” among nuclear powers is impressive.³⁰

Some might have difficulty imagining why nuclear leaders would behave in the manner described here, so a brief discussion on the role of structure in international politics is warranted. Structural analysis addresses the positioning of actors in social and political systems—the properties and relations that make them parts of a system.³¹ Within the field of international politics, most scholars accept Waltz's tripartite conception of structure (functional differentiation, ordering principles, and power distribution). In the standard Waltzian account, international systems are largely undifferentiated—and pretty much all the same. States are assumed to be “like units” made different only by their position among other states, strong states being privileged over weak ones. Anarchy is the “ordering principle” of international systems, meaning that there is no higher authority to which states can appeal to reconcile differences or ensure their survival. Power is distributed unevenly throughout the system, so states are unequal—making international systems unequal. To say structural theory provides a positional picture of politics is to say that states can be measured in terms of how they stack up against one another in terms of relative power. Few things affect this “stacking up” more than nuclear weapons, which is why statesmen pay attention to who has these weapons and if they might be used against them.

To say that nuclear weapons socialize leaders to the dangers of adventurism is to say that leaders pay attention to survival, because no one else can do so for them; the structure of international life prohibits it. In this sense, the “survival motive” is law-like. All human conduct is shaped in some measure by what individuals believe to be general laws. In science, laws establish relations between variables. Kepler’s laws of planetary motion described the orbits of the planets by proving that a planet “sweeps out equal areas of its ellipse in each equal interval of time.”³² That is not how I use the term here, for in international politics there are no laws that operate with such fidelity. There are, however, softer, law-like relationships. “Such relationships are not based on a linkage that has been found, but on one that has been found repeatedly.”³³ To assert that democracies do not fight wars against one another is to make a law-like statement. Moreover, states, like humans, respond to signals and interpret them by putting them into some general category thought to be law-like. As Jacob Bronowski noted, “We then assume that the future will have some general likeness with futures we have met before which followed this kind of signal, and this is the kind of future we prepare for.”³⁴ Few things send a stronger signal to statesmen than the threat of nuclear war, and in this regard, the threat of nuclear war plays a socialization role. Since socialization is important to this discussion, we need to be clear about its meaning.³⁵

Socialization refers to a relationship between at least two parties where “*A* influences *B*. *B*, affected by *A*’s influence, then influences *A*.” As Waltz put it, “Each is not just influencing the other; both are being influenced by the situation their interactions create.” Moreover, the behavior of the pair cannot be “apprehended by taking a unilateral view of either member.”³⁶ Each acts and reacts in accordance with the other. The “global teenager” provides an example of the socialization process that occurs throughout the world. No one tells all the teenagers in the world to dress alike, but most of them do most of the time.

Likewise, no one tells all the states in the world to behave themselves, but most of them do most of the time. States are socialized to this idea by interacting with other states, particularly the great powers—whose role it is to set and enforce the rules of the game. In both instances, socialization is “a process of learning to conform one’s behavior to societal expectations” and a “process of identity and interest formation.”³⁷ Socialization draws members of a group into conformity with its norms. Socialization also encourages similarities in behavior. Analogically speaking, nuclear

relationships are like economic markets in that both are about self-help. They are also “individualist in origin, spontaneously generated, and [may even be] unintended.”³⁸ But unlike markets, which can be left to their own devices to self-correct in times of disequilibrium, nuclear relationships must be corrected by leaders in times of crisis. This can be explained in terms of structural theory and the socializing effect of the survival motive. Because no higher authority exists to protect states from the harmful intentions of others, statesmen must pay attention to survival. Nothing threatens survival more than the threat of nuclear war, which is why nuclear statesmen are so highly sensitive to it. Even more importantly for this discussion, statesmen do not seem to be sensitive to the actual number of nuclear weapons a state might possess, only whether or not a state possesses any at all. From this, can one conclude that nuclear leaders act with law-like regularity? The Cuban missile crisis and the Kargil conflict are illustrative.

During the Cuban missile crisis, Kennedy and Khrushchev sought solutions short of war, despite their sharp political, cultural, and economic differences.³⁹ That the Soviets might have underestimated how the United States would react when confronted with a relatively small number of missiles based off the coast of Florida is not as telling as how both leaders behaved when they realized what was at stake. Secretary of State Dean Rusk’s comment that “We were eyeball to eyeball” is illustrative for several reasons. First, the two sides were staring into the face of grave danger. Second, both grasped the importance of avoiding nuclear war. Lastly, even though the situation was riddled with ambiguity, the two sides recognized that the outcome of the crisis depended as much on the moves of one side as it did the other. One quotation is representative of many others.⁴⁰ In a meeting with the Joint Chiefs of Staff, President Kennedy outlined what was on his mind:

If we attack Cuban missiles, in any way, it gives them a clear line to take Berlin, as they were able to do in Hungary under the Anglo war in Egypt. We would be regarded as the trigger-happy Americans who lost Berlin. We would have no support among our allies. We would affect the West Germans’ attitude toward us. And people would believe that we let Berlin go because we didn’t have the guts to endure Cuba.

If we go in and take them out in an air strike . . . we increase the chance greatly, as I think—there’s bound to be a reprisal from the Soviet Union, there always is—of their just going in and taking Berlin by force. Which leaves me one alternative,

which is to fire nuclear weapons—which is a hell of an alternative—and begin a nuclear exchange, with all this happening.⁴¹

During the entire crisis, the number of Soviet nuclear weapons on Cuban soil was never the focal point of US concern; in fact, the true number of these weapons—strategic and tactical—was not known until many decades later. The avoidance of nuclear war was the focal point; the threshold easily recognized, best not crossed, and worth avoiding. As early as 1962, the superpowers understood that they could race to the brink but no further, lest they run the risk of nuclear war; a risk that neither side would willingly take. Following the crisis, both sides took steps to reduce uncertainty and improve crisis stability.

As Kennedy and Khrushchev became increasingly socialized to the possibilities of nuclear war, the relationship that emerged was tempered by caution in that each leader sought solutions short of war. Something similar seems to have occurred during the Kargil conflict between India and Pakistan. Prior to acquiring a relatively small nuclear capability, Pakistan fought three bloody wars with India. Today, with both parties possessing nuclear forces, the sharp differences that separate India and Pakistan have not been sufficient to drive either side to war.⁴² While the two sides actively engage in a game of tit-for-tat, nuclear weapons seem to have socialized leaders to the dangers of nuclear war, and as a result, the relationship between them has steadied. Far from perfect, relations between India and Pakistan can be summarized as tense but stable.⁴³

The presence of nuclear weapons played a role in shaping the character of the Kargil conflict, the first conflict between nuclear-armed India and Pakistan. A retrospective look indicates that neither side actually threatened the other with the use of nuclear weapons.⁴⁴ This was not clear during the conflict, however. According to one source, nuclear threats were issued between Pakistan and India no fewer than 13 times.⁴⁵ The most prominent of these was made by Pakistan's foreign secretary Shamshad Ahmad when he stated, "We will not hesitate to use any weapon in our arsenal to defend our territorial integrity."⁴⁶ Additionally, it was believed that both sides increased their nuclear readiness levels.⁴⁷ US intelligence agencies believed Pakistan had mobilized and was arming its missiles with nuclear warheads—a fact that caused President Clinton to lean heavily on Prime Minister Sharif to withdraw Pakistani forces and bring the conflict to an end.⁴⁸ India, too, had reportedly placed its forces at "Readiness State 3"—

preparing aircraft as well as short- and medium-range ballistic missiles for use.⁴⁹

Whether overt threats were exchanged or nuclear forces mobilized seems to have mattered less than the presence of nuclear weapons. That is, nuclear weapons seem to have played a role in how each side fought during the conflict. Of the two states, India was most notable for the restraint it put on its armed forces. Unlike in previous military responses to Pakistani aggression, Indian leadership took great care to avoid sending Indian forces into Pakistani territory.⁵⁰ According to P. R. Chari, Indian forces “were under strict orders not to cross the LoC [Line of Control] under any circumstances. Hot pursuit of retreating enemy forces was not permitted, nor could their bases across the LoC be attacked.”⁵¹ Additionally, though it may have been militarily prudent to divert Pakistani attention, India refrained from taking the fight outside of the immediate Kargil region.⁵²

Although the cover of nuclear weapons may have played a role in convincing Pakistan it could get away with the initial incursion, when the miscalculation became apparent, Pakistan showed careful resolve to avoid further escalation. Like India, Pakistan may have benefitted from opening a second or multiple fronts, but even in the face of India’s successful counteroffensive, Pakistan limited the fighting to the Kargil region.⁵³

Nuclear weapons also ensured that diplomatic channels remained open between Pakistan and India throughout the conflict. Pakistani and Indian leadership met both officially and in secret in attempts to defuse the situation and prevent further escalation.⁵⁴ The presence of nuclear weapons almost certainly ensured the international community took a more active role in ending the conflict. The United States, in particular, went to great lengths to encourage both India and Pakistan to avoid escalation and end the conflict. As noted above, pressure from President Clinton may have been the final deciding factor in Sharif’s decision to withdraw Pakistani troops.

From the perspective of socialization, the behavior of India and Pakistan cannot be resolved into a simple set of two-way interactions. To say each side was interacting, with the action of one eliciting a reaction from the other, obscures the socialization effects produced by their interactions. “Each acts and reacts to the other. Stimulus and response are part of the story. But also the two of them act together in the game, which—no less because they have devised it—motivates and shapes their behavior. Each is playing to each other and to the tensions their interactions produce.”⁵⁵ Because socialization draws members of a group into conformity with its

norms, it reduces variety. Conformity to group norms and reducing variety are essential elements in creating and sustaining persistent relations within and among states. The persistent characteristics of group behavior result in part from the qualities of its members and in part from the characteristics of the relationship their interactions produce.⁵⁶ In this sense, nuclear relationships, as exemplified by the behavior of the United States, Russia, India, and Pakistan seem to be cautious ones. From this, one should not conclude that nuclear leaders behave with law-like regularity. But one can infer that nuclear leaders, even in times of crisis, tend to seek solutions short of all-out war, which is another way of saying the possibility of nuclear war makes them risk-averse.

Anticipating Three Objections

Critics will contend that the kind of restraint noted above rests on a presumed level of rationality not found in the real world. In fact, the opposite seems to be true. It is more difficult to find an example of the irrational actor in the real world than a rational one. What, exactly, is an irrational actor? Is it a state that violently disagrees with the policies of the United States? If that is the case, there are precious few. North Korea and Iran might fit this description, although neither is particularly violent, at least toward the United States. On the other hand, it could be someone who fits the literal meaning of the word “irrational.” An actor is said to be irrational if he or she demonstrates an inability to reason, but in international politics those actors are hard to find. Instead, what one finds are fairly reasonable actors who formulate decisions based on their interpretation of the world around them. Few things shape the “world around them” more than the presence of nuclear weapons, which is why nuclear leaders behave cautiously when staring into the face of another nuclear leader. It should be noted that policies based on that sort of reasoning are neither rational nor irrational, but merely reasonable.

With respect to numbers, there are those who insist the United States must maintain a nuclear arsenal large enough to cover all contingencies. In other words, while China has to contend with the United States and Russia, the United States has a greater number of potential contenders and needs a larger number of weapons to cover a larger number of options.⁵⁷ There is logic in that line of reasoning, but it tends to overemphasize the role of deterrence while overlooking the role of dissuasion. The United States

and Russia are already dissuaded by China, even if that were or were not China's original intention. Presumably, if China's relatively small nuclear force is capable of dissuading the United States and Russia, it is also capable of dissuading India and Pakistan. In other words, China's small nuclear arsenal creates enough options for it to dissuade three regional nuclear powers as well as the United States. Unless one assumes the United States must guard against something far more dangerous than what China faces, it is reasonable to conclude that a relatively small nuclear force is all the United States needs to meet its security requirements. Arguments for a large force seem to lose their meaning unless they are tied to a counter-force strategy which, when judging by the behaviors of nuclear leaders, is not necessary. As McNamara's earlier remarks attest, the superpowers increased their nuclear numbers to prevent one side from acquiring a numerical advantage over the other. All the while, leaders on both sides lost sight of the fact that nuclear weapons, while incapable of producing military effects, are extremely capable of producing political ones.

Yet some "large number" strategists will wonder about the remotest of possibilities: the United States awakens one day to discover that all the nuclear powers in the world—including some of its staunchest allies like England, France, and Israel—have united against it. What then? To ensure deterrence holds in such a world, the United States would presumably need at least one more nuclear weapon than all the nuclear powers on Earth combined.⁵⁸ But again, even in this most bizarre of worlds, the socializing effects of nuclear weapons would be felt by all, because challengers could never be sure who the United States would strike first, which is something its leaders would have to threaten to do to ward off attack.

Lastly, some will argue that the United States should maintain a large enough arsenal so it can extend security guarantees to others. There is an important case to be made for such guarantees. Yet, while nuclear guarantees might be our fate, one wonders if they should be our *de facto* policy. As the Kissinger quote cited earlier suggests, guarantees can put guarantors in a tough spot. Perhaps the most important consideration when thinking about guarantees is whether they will prevent a state from acquiring a capability of its own. France developed a nuclear capability of its own for a number of reasons, to include its history of strategic decline, serious questions about allies stemming from Dien Bien Phu and the Suez crisis, the expense of conventional rearmament, fears about its infantry becoming NATO cannon fodder, and the need to restore grandeur. If,

above all else, France were motivated by a sense of grandeur, there seems to be little guarantees could have done—how could a security guarantee help France recapture its grandeur? The point being, states seek nuclear weapons for a variety of reasons. Some will be satisfied with guarantees; others might not. Understanding the conditions and contexts for extending guarantees—to include to whom and when—seems essential.⁵⁹

Conclusions

Structural theory helps explain what I call “the common sense of small nuclear arsenals.” The central claim advanced here is that small numbers of nuclear weapons seem to socialize leaders to the dangers of adventurism and, in effect, halt them from behaving or responding recklessly to provocation. Policymakers should rightly be concerned with the implications of this argument.

A state does not have to demonstrate a capacity to win a nuclear war to prevent one, because the devastating consequences of nuclear war are transparent, well understood, and universally recognized. McGeorge Bundy’s comment is worth repeating: “A decision that would bring even one hydrogen bomb on one city of one’s own country would be recognized in advance as a catastrophic blunder; ten bombs on ten cities would be a disaster beyond history; and a hundred bombs on a hundred cities are [*sic*] unthinkable.”⁶⁰ There is, however, a divide between war fighters—who must think about such things—and arms controllers who work to reduce the number of weapons in the world. Both find common ground on this: from the beginning, nuclear weapons and US policy have been devised to prevent the outbreak of a nuclear war, not to win one.

On that axis, things like readiness, survivability, and flexibility are vital ingredients, and a robust nuclear triad appears the most effective scheme to prevent the outbreak of nuclear war. That small states can achieve relative security without one is telling. One wonders how US policymakers will react if China were to build a triad of its own? Would it be interpreted as a means to enhance security, or would it appear threatening? With that in mind, the question for US policymakers seems to be what size nuclear force the United States needs to achieve relative security. It has been suggested that the United States could ensure its security with a relatively small force comprised of 311 nuclear weapons. That may not be the ideal number and, in fact, that number was suggested as a way to stimulate

debate on nuclear strategy, not to close any doors regarding force structure.⁶¹ As evidenced by the president's interest in reducing the size of America's arsenal, however, it is no longer unreasonable to think that a small force might be as capable of deterring and dissuading as a large one.

In the end, structural theory claims that the international system constrains what states can and cannot do. Nuclear weapons add to this by socializing leaders to the dangers of nuclear war. Seven of the nine nuclear states recognize this and have concluded that a small number of nuclear weapons are sufficient to deter and dissuade rivals. Might the United States become number eight? That is for policymakers to decide. It would seem to make common sense, but common sense is not what we put into the world; it is what we find there. **ISSQ**

Notes

1. The authors write, "It is possible that our deterrence goals can be achieved with a smaller nuclear force, which would reduce the number of nuclear weapons in our inventory as well as their role in U.S. national security strategy." *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington: DoD, January 2012), 5.

2. Exact numbers are hard to come by. According to one article, Russia has approximately 12,000, the United States 9,400, France 300, China 240, Britain 225, Israel 60–80, Pakistan 70–90, India 60–80, and North Korea fewer than 10. Robert S. Norris and Hans M. Kristensen, "Global Nuclear Inventories 1945–2010," *Bulletin of Atomic Scientists* 66, no. 77 (October 2010). Other estimates put the US number closer to 5,000, placing the total inventory between Russia and the United States closer to 17,000.

3. I wish to thank Edwina Campbell, Steve Chiabotti, Chuck Costanzo, Richard Muller, Alex Roland, Tim Schultz, and two anonymous reviewers for their thoughtful comments and suggestions. Additionally, thank you to Jeremy Olson whose work as a SAASS student was superb, as is his unpublished thesis entitled, "The Best Defense: Making Maximum Sense of Minimum Deterrence," upon which I relied for the Kargil discussion.

4. France was motivated by its history of strategic decline, serious concerns about allies, the expense of conventional rearmament, and fears about its infantry becoming NATO cannon fodder, but above all, the need to restore greatness and grandeur. See Jurgen Brauer and Herbert Van Tuyall, *Castles, Battles and Bombs* (Chicago: Chicago University Press, 2008), 244–87.

5. This theme reverberates throughout this discussion and originates with Kenneth Waltz, *Theory of International Politics* (New York: McGraw Hill, 1979).

6. Bernard Brodie, *Strategy in the Missile Age* (Princeton, NJ: Princeton University Press, 1959), 275.

7. Bernard Brodie, *The Absolute Weapon* (New York: Harcourt Brace, 1946), 76.

8. International Commission on Nuclear Nonproliferation and Disarmament (ICNND), *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers* (Canberra and Tokyo: ICNND, November 2009, December 2009), <http://www.icnnd.org/reference/reports/ent/index.html>. For the general argument, see Barbara G. Levi, Frank N. Von Hippel, and William Daugherty,

“Civilian Casualties from ‘Limited’ Nuclear Attacks on the Soviet Union,” *International Security* 12, no. 3 (Winter 1987/88).

9. Included in this 50-percent loss are those weapons and their delivery systems that are not available or cannot reach their targets due to reliability and penetration issues. See Albert Wohlstetter, “The Delicate Balance of Terror,” *Foreign Affairs* 37, no. 2 (April 1959).

10. For the workings of deterrence, see Brodie, *Absolute Weapon*; Lawrence Freedman, *The Evolution of Nuclear Strategy* (New York: Palgrave, 2003); William Fox, *The Superpowers: The United States, Britain and the Soviet Union* (New York: Harcourt and Brace, 1954); Alexander George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974); Morton Halperin, *Limited War in the Nuclear Age* (New York: John Wiley and Sons, 1963); Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960); George Kennan, *Russia, the Atom and the West* (New York: Harper, 1958); Henry Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Harper, 1957); Robert Osgood, *Limited War: the Challenge to American Strategy* (Chicago: Chicago University Press, 1957); Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960); and Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966).

11. Henry Kissinger, quoted in Kenneth Waltz, “Nuclear Myths and Political Realities,” *American Political Science Review* 84, no. 3 (September 1990).

12. See Emanuel Adler, “The Emergence of Cooperation: National Epistemic Communities and the International Evolution of Nuclear Arms Control,” in *Knowledge, Power, and International Policy*, ed. Peter Haas (Columbia: University of South Carolina Press, 1997).

13. See Waltz, “Nuclear Myths and Political Realities,” 733.

14. David Alan Rosenberg, “The Origins of Overkill: Nuclear Weapons and American Strategy 1945–1960,” *International Security* 7, no. 4 (Spring 1983).

15. Alain Enthoven and K. Wayne Smith, *How Much is Enough: Shaping the Defense Program* (New York: Harper and Row, 1971).

16. *The Dynamics of Nuclear Strategy*, Department of State Bulletin LVII, 9 October 1967.

17. See Waltz, “Nuclear Myths and Political Realities,” 734.

18. McGeorge Bundy, “To Cap the Volcano,” *Foreign Affairs* 48, no. 1 (October 1969): 9–10.

19. See Fared Zakaria, “GPS: What in the World? Nuclear Magic Number,” *CNN*, 4 April 2010, <http://transcripts.cnn.com/TRANSCRIPTS/1004/04/fzgps.01.html>; David E. Hoffmann, “Despite New START, the U.S. and Russia Still Have Too Many Nuclear Weapons,” *Washington Post*, 11 April 2010; Gary Schaub Jr. and James Forsyth Jr., “An Arsenal We Can All Live With,” *New York Times*, 24 May 2010; Schaub and Forsyth, “Letters to the Editor: The Right Number of Nuclear Weapons?” *New York Times*, 31 May 2010, <http://www.nytimes.com/2010/06/01/opinion/101nuke.html>; Max Berman, “Air Force Strategists Say US Should Unilaterally Cut Nukes By 90 Percent,” *Wonk Room*, 17 March 2010, <http://wonkroom.thinkprogress.org/2010/03/17/air-force-strategists-say-us-should-cut-nukes>; and Charli Carpenter, “USAF Strategists: US Should Drastically and Unilaterally Reduce Nuclear Arsenal,” *Lawyers, Guns and Money* blog, 18 March 2010.

20. Nuclear weapons also play a prestige or stature role, for example. See Suzanne Buono, “Demystifying Nuclear Proliferation: Why States Do What They Do” (PhD diss., Johns Hopkins, 2011).

21. Patrick M. Morgan, *Deterrence Now* (Cambridge, UK: Cambridge University Press, 2003). Also see David Yost, “Dissuasion and Allies,” *Strategic Insights* 4, no. 2 (February 2005), for more recent usage of the term *dissuasion*.

22. Schelling, *Arms and Influence*, 71–72. For purposes of comparison, see Schelling’s discussion on the differences between deterrence and compellence.

23. *Ibid.*, 72.

24. Steven M. Walt, "All the Nukes You Can Use," *Foreign Policy*, 24 May 2010, <http://walt.foreignpolicy.com/category/topic/military>.
25. "Viable" assumes one possesses not only a survivable weapon but also a reliable means to deliver it.
26. I thank Everett Dolman for this.
27. William J. Perry and James A. Schlesinger, chairmen, *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington: US Institute for Peace, 2009), 10–11.
28. These numbers will be reduced by 2017 in compliance with the new Strategic Arms Reduction Treaty ("New START"). By that time, the United States is scheduled to have no more than 700 deployed strategic delivery vehicles (SDV).
29. If, as some suggest, China feels encircled by the American presence in the region, the United States must devise a strategy that will (1) recognize that China has legitimate interests in the region and find ways to accommodate China as it pursues them, (2) assure allies in the region that the growth of China's power does not threaten them, and (3) avoid actions that provoke the Chinese. Regarding all three, basing becomes a major concern. The recent deployment of 2,500 Marines to Australia might mark the beginning of a strategy designed to do all of the above.
30. The term *long peace* was introduced in John Lewis Gaddis, "The Long Peace: Elements of Stability in the Postwar International System," *International Security* 10 (Spring 1986): 92–142. On the law-like nature of the democratic peace, see Jack Levy, "The Causes of War: A Review of the Evidence," in *Behavior, Society and Nuclear War*, eds. Phillip E. Tetlock et al. (New York: Oxford University Press, 1989). For the philosophical argument, see Michael Doyle, "Kant, Liberal Legacies, and Foreign Affairs Parts I and II," *Philosophy and Public Affairs* 12 (1983): 205–35, 323–53. For a quantitative account, see Rudolph J. Rummel, "Libertarianism and International Violence," *Journal of Conflict Resolution* 27 (1983): 27–71. For an example of the structural account, see Clifton T. Morgan and Sally Campbell, "Domestic Structure, Decisional Constraints, and War: So Why Kant Democracies Fight?" *Journal of Conflict Resolution* 35 (1991): 187–221.
31. Jack Donnelly, "The Differentiation of International Societies: An Approach to Structural International Theory," *European Journal of International Relations* 18, no. 1 (2011): 151–76. As Donnelly suggests, Waltz's neorealism may have become pace, but structural theorizing has not. Also see Barry Buzan and Mathias Albert, "Differentiation: A Sociological Approach to International Relations Theory," *European Journal of International Relations* 16, no. 3 (September 2010): 315–37.
32. Jacob Bronowski, *The Common Sense of Science* (Cambridge: Harvard University Press, 1978), 27.
33. Waltz, *Theory of International Politics*, 1.
34. Bronowski, *Common Sense of Science*, 114.
35. A significant element of structural theory is the concept of socialization. For the definitive account of how socialization works on material concerns, see Waltz, *Theory of International Politics*, chap. 4 and 74–76. For the same regarding ideational ones, see Alexander Wendt, *Social Theory of International Politics* (Cambridge: Cambridge University Press, 1999).
36. Waltz, *Theory of International Politics*, 74–75.
37. Wendt, *Social Theory of International Politics*, 170.
38. Waltz, *Theory of International Politics*, 91.
39. Culture has become an important concern for the US military since 9/11. Often it is portrayed as a variable equal to or greater than force itself. Here, however, force seems to transcend cultural differences.

40. See Ernest R. May and Philip D. Zelikow, *The Kennedy Tapes: Inside the White House During the Cuban Missile Crisis* (Cambridge: Harvard University Press, 1997).
41. *Ibid.*, 175–76.
42. The conflict began in May 1999 and ended in July of that year. During this time, Indian army units attacked Pakistani forces, and Indian jets bombed bases high in the Himalayan Mountains. Although Indian forces carefully stayed on their side of the line of control in Kashmir, Indian prime minister Atal Bihari Vajpayee informed the US government that he might have to order an invasion into Pakistan. Even though at least 1,000 Indian and Pakistani soldiers were killed during this crisis, I do not agree with those who think of Kargil as a war. Rather, my interpretation of Kargil is that the presence of nuclear weapons seems to have prevented a nasty skirmish from becoming all-out war. See Scott D. Sagen and Kenneth N. Waltz, *The Spread of Nuclear Weapons* (New York: W. W. Norton, 2003).
43. For an interesting perspective, see Sumat Ganguly, “Nuclear Stability in South Asia,” *International Security* 33, no. 2 (Fall 2008): 45–70; and S. Paul Kapur, “Ten Years of Nuclear Instability in Nuclear South Asia,” *ibid.*, 71–94.
44. Timothy D. Hoyt, “Kargil: The Nuclear Dimension,” in *Asymmetric Warfare in South Asia: The Causes and Consequences of the Kargil Conflict*, ed. Peter R. Lavoy (Cambridge: Cambridge University Press, 2009), 156.
45. Robert Wirsing, *Kashmir in the Shadow of War: Regional Rivalries in a Nuclear Age* (Armonk, NY: M. E. Sharpe, 2003), 49.
46. *Ibid.*, 49.
47. Hoyt, “Kargil,” 158.
48. P. R. Chari, “Reflections on the Kargil War,” *Strategic Analysis* 33, no. 3 (2009): 363.
49. Hoyt, “Kargil,” 158.
50. *Ibid.*, 160.
51. Chari, “Reflections on the Kargil War,” 362.
52. John H. Gill, “Military Operations in the Kargil Conflict,” in *Asymmetric Warfare in South Asia*, 124.
53. Chari, “Reflections on the Kargil War,” 363.
54. Peter R. Lavoy, “Why Kargil Did Not Produce General War: The Crisis Management Strategies of Pakistan, India, and the United States,” in *Asymmetric Warfare in South Asia*, 194–96.
55. Waltz, *Theory of International Politics*, 75.
56. *Ibid.*, 76.
57. I thank Stephen Wright for this.
58. In fact, numbers are only one part of the equation, although I believe them to be the most important part. Besides numbers, one must account for the size of the weapons, delivery systems, nature of targets, and defensive systems.
59. Guarantees may also increase moral hazard, emboldening states to take risks they would not ordinarily take if acting on their own. Additionally, they can be complicated by the dilemma of adverse selection; guarantors rarely know in advance if they have guaranteed a “worker or a shirker.” That said, I do not think the United States should step away from its guarantees, but it is important to examine the value of such guarantees. Under what conditions are they most beneficial? For example, while it seems to make sense to afford a guarantee to Japan, is it reasonable to expect the United States to do the same for every potential NATO member? See Brauer and Tuyall, *Castles, Battles and Bombs*, 261–65.
60. McGeorge Bundy, “To Cap the Volcano,” *Foreign Affairs* 48, no. 1 (October 1969): 9–10.
61. See James W. Forsyth Jr, Chance Saltzman, and Gary Schaub Jr, “Remembrance of Things Past: The Enduring Value of Nuclear Weapons,” *Strategic Studies Quarterly* 4, no. 1 (Spring 2010): 74–89.