

## Viewpoint

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# Prisms and Paradigms

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The Cold War has been replaced by asymmetric warfare, where weak states or terrorist groups strike at U.S. vulnerabilities while skirting U.S. military strength. Cold War security dilemmas, such as a massive “bolt from the blue” missile attack and the rumble of Soviet tank armies across the German plain, have given way to very different surprise attack scenarios. Americans now dread hijackers who fly planes into buildings, trucks carrying “fertilizer bombs,” and letters without return addresses that could be carrying strange, powdery substances. The leakage of deadly materials or weapons from aging Soviet stockpiles to terrorist groups or states that support them is a threat to international security at least as serious as the old Soviet Army and Strategic Rocket Forces. The Soviet Union proved to be deterrable; suicide bombers are not.

During the Cold War, the United States succeeded in containing the Soviet Union through strong alliances, preventive diplomacy, nuclear deterrence, and conventional military capabilities. In asymmetric warfare, power projection capabilities, cohesive alliances, and preventive diplomacy remain essential, but nuclear weapons and tank

armies are not very helpful. In fighting against unconventional foes, the most meaningful assets are likely to be the cooperation of nearby states, timely intelligence, air power, smart weapons, and special forces.

The symbolic end of the Cold War occurred many times over, with the tearing down of the Berlin Wall and the statue of Felix Dzerzhinsky outside KGB headquarters in Moscow, and final lowering of the Soviet flag atop the Kremlin. Similarly, many events dramatized the advent of asymmetric warfare, including the 1983 demolition of the U.S. Marine barracks in Beirut, the 1998 bombing of the U.S. embassies in Kenya and Tanzania, and the 2000 attack on the USS *Cole* in Aden harbor by an explosives-laden pontoon boat. All of these incidents left their mark, but none of them prompted the development of vastly different conceptions of national security. After each of these shocks, the U.S. Department of Defense continued to request and spend money in familiar ways. And after each wake-up call, members of the U.S. Congress and the executive branch continued to wrangle over nuclear weapons, missile defenses and strategic arms control in utterly familiar terms.

In this sense, the transition from Cold War to asymmetric warfare occurred rather precisely on September 11, 2001. When two hijacked planes slammed into the twin towers of the World Trade Center and another into the Pentagon, the immediacy of the terrorist threat and the inadequacy of U.S. readiness and response were watched by a stunned nation in real time. The scale, symbolism, and audacity of these suicidal attacks—and the thought of a fourth hijacked plane heading for Washington that never reached its target because passengers stormed the cockpit—will remain a permanent scar in the collective consciousness of an entire citizenry. After September 11, 2001, Americans knew without a shadow of a doubt that their Cold War conceptions of threat and response—downsized but not discarded in the decade after the collapse of the Soviet Union—were antiquated beyond repair. The paradigm shift from Cold War to asymmetric warfare was hard-wired and fused on that day of national mourning and transformation.

The central organizing principle for U.S. national security during the Cold War was the containment of Soviet power and influence. The global contest between two great powers armed with many thousands of nuclear weapons required concepts and practices to prevent the strategic competition from crossing the nuclear threshold. Strategic stability was based, in part, on mutual acceptance that each could wreak unimaginable damage. Assured destruction (soon labeled Mutual Assured Destruction, or MAD) was more than a fact of Cold War life; it was codified by treaties permitting huge offensive nuclear arsenals while expressly prohibiting national missile defenses.

Most of the creative thinking about nuclear weapons and arms control during the Cold War took place in the late 1950s and early 1960s. During this period, it was clear that the prevailing nostrums of massive retaliation and nuclear disarmament, developed in the first decade of the Cold War, needed to be reconsidered. Important books such as Henry A. Kissinger's *The Necessity for Choice*, Bernard Brodie's *Strategy in the Missile Age*, Thomas C. Schelling and Morton H. Halperin's *Strategy and Arms Control*, Hedley Bull's *The Control of the Arms Race*, and a collective effort edited by Donald G. Brennan, *Arms Control, Disarmament, and National Security*, mapped new terrain. This body of work rejected the nuclear doctrine of massive retaliation, replacing it with notions of graduated nuclear deterrence.<sup>2</sup> These authors also rejected the notional national objective of general and complete

nuclear disarmament, creating in its place a new field of strategic arms control.

One of the most provocative authors during this time was Herman Kahn, who published a collection of essays under the title *Thinking About the Unthinkable*. Kahn went enthusiastically where few nuclear "theologians" dared to tread, applying the anodyne nuclear deterrence constructs of fellow theorists to war-fighting scenarios. While others dealt with the abstractions of deterrence and arms control theory, Kahn focused on how to "come to grips with the problems that modern technology and current international relations present to us."<sup>3</sup> The resulting work produced complex escalation ladders of nuclear weapons use along with staggering estimates of death tolls. The enthusiasm with which Kahn approached this grim task was easily caricatured—Hollywood produced two memorable Kahn-like characters, *Dr. Strangelove*, played by Peter Sellers, and the woefully miscast Walter Matthau in *Failsafe*—but he was a very real figure of the Cold War, attempting to apply cold logic and analysis to a numbingly terrifying nuclear stand-off.

After the events of September 11, 2001, we again need to come to grips with current international relations. During the Cold War, the unthinkable never happened. The unthinkable of asymmetric warfare has already happened, and could happen again and again.

As we enter this new era, we carry heavy baggage from the past—our nuclear arsenal, doctrines of deterrence, targeting plans, the remnants of strategic arms control, and lingering divisions over missile defenses. The time is ripe for a new wave of creative thinking about this legacy. We need to re-conceptualize the role that our traditional strategic capabilities and our emerging defenses will play in containment, prevention and response in a new era of asymmetric threats. Herman Kahn and others asked during the Cold War what might happen if deterrence failed. Now we must ask similar questions in an entirely different context.

What value do missile defenses and nuclear weapons have against much weaker states or terrorist cells? How should the United States respond to new kinds of vulnerability as the world's sole superpower with no strategic competitor in sight for at least a decade? Should Washington continue to embrace vulnerability as a central strategic concept in dealing with Russia and extend this construct to Beijing, the only "near peer competitor" (to use the Pentagon's term) on the horizon? How should the

United States size its nuclear weapons and configure its target lists as the lone superpower? Where do missile defenses fit into a world of U.S. military predominance? After President George W. Bush's decision to abrogate the Anti-Ballistic Missile (ABM) Treaty, what should replace MAD as a central organizing principle for nuclear arsenals and strategic arms control?

A new approach must also be fashioned to fill the void created by partisan division over arms control and multilateral nonproliferation treaties, one that is geared to the shift from the Cold War to asymmetric warfare, and one that can generate sustained, bipartisan support in Washington and in other capitals. The Bush administration's decision to withdraw from the ABM Treaty leaves a significant void in U.S. national security policy, one that cannot be filled simply by deploying ballistic missile defenses. Moreover, the Bush administration also walked away from the second Strategic Arms Reduction Treaty (START II) and a long-considered protocol to improve monitoring of the Biological Weapons Convention. Prior to this, Republican senators rejected the Comprehensive Test Ban Treaty (CTBT). Some Republican officials and members of Congress are eager to resume nuclear testing and to proceed with the weaponization of space.

There is a strong working consensus in the United States on many essential elements of American security, such as the need for better intelligence capabilities and preventive diplomacy, more agile crisis management, superior conventional capabilities, and an invulnerable nuclear deterrent. On the matter of arms control and the role of treaties, however, there is a great deal of partisan debate.

The responsibility for the weakness of treaty instruments is, after all, widely shared. Treaty outliers, especially India, Pakistan, and Israel, have injured nuclear nonproliferation efforts. NPT parties that have bled away from within, such as North Korea, Iran and Iraq, have done great damage, as have states that have placed commercial interests above the strengthening of treaty obligations, including France, Japan, and Germany. The globe's sole superpower, the United States, which has taken to using or discarding treaties at its convenience, has contributed disproportionately to this mess. The combined effects on treaty norms from wounds inflicted from the top down, from the mercantile powers, covert proliferators, and outliers are, of course, mutually reinforcing. The weaker the norms embedded in treaties, the more inclined U.S. skeptics will be to trash these compacts and resort to the role of the global sheriff.

The growing void that was once filled by arms control and nonproliferation treaties comes at a time when nuclear, chemical and biological weapons or materials remain firmly established as the leading threats to national, regional and international security. These dangers no longer emanate from Soviet strength, but from lax Russian security practices, insufficient export controls, tempting foreign offers, and criminal enterprises linked to governmental authorities. These dangers also emanate from troubled regions where leaders seek domination over or protection against their neighbors. The weapons the United States fears most provide the best insurance policy against U.S. military predominance. The most likely delivery vehicles for these deadly weapons are trucks, container ships, civilian airliners, and subway cars—not ocean-spanning missiles. The precepts of MAD have little applicability for these security dilemmas. Nor is a “one size fits all” concept of nuclear deterrence very useful in dealing with small states or terrorist groups that cannot match U.S. strengths, so instead seek to exploit U.S. weaknesses. “Limited nuclear options” against terrorist cells are as obsolete as massive retaliation was in the 1950s against a nuclear-armed Soviet Union.

#### IN THE WAKE OF THE COLD WAR

During the Cold War, Hawks and Doves fought fierce contests over nuclear weapons and arms control treaties. But as nuclear arsenals grew, both camps came to accept (apart from one significant interlude) the constructs of MAD. That interlude—President Ronald Reagan's embrace of the Strategic Defense Initiative and nuclear abolition—led to surprising outcomes. At the end of the Reagan administration, MAD remained very much in place, while advanced missile defenses remained on the shelf. But Reagan's twin challenges to nuclear orthodoxy, combined with Mikhail Gorbachev's bold initiatives, generated very deep cuts in theater nuclear forces, while paving the way for deep cuts in strategic arsenals.

The strategic concept of MAD remained in place during the first decade after the demise of the Soviet Union, more from force of habit than from official endorsement. The Clinton administration shied away from an alternative conceptualization, and had this effort been made, it would have faced strenuous opposition from combative Republicans on Capitol Hill. Bipartisan constructs in the 1990s were rare phenomena and, in any event, large questions relating to the role of nuclear weapons and missile

defenses were in such flux that the timing was not right for consensus building.

Instead, the Clinton administration devoted itself to implementing the extraordinary strategic arms reduction accords achieved during the last years of the Cold War. There was much unfinished business resulting from the breakthroughs generated by the serendipitous conjunction of Ronald Reagan and Mikhail Gorbachev. After an initial hesitancy, the administration of George H.W. Bush seized the opportunity to finalize accords reducing strategic forces. The Clinton administration sought to formalize these accords through tortuous ratification processes and to proceed dutifully in step-by-step fashion to secure further reductions. These efforts met with only limited success, because the demise of the Soviet Union undermined the rationale and the bipartisan support for strategic arms control treaties predicated on equality.

The Clinton administration was confident and adept in domestic policy but tentative abroad and weak in defending its foreign labors on Capitol Hill. After heroic efforts in helping to denuclearize states in the former Soviet Union, the Clinton team managed to secure the entry into force of START I, concluded in 1991. But this was the only arms treaty ratified during President Clinton's watch without crippling reservations. The Chemical Weapons Convention squeaked through the Senate, heavily weighted with such conditions. Subsequent accords adapting the Anti-Ballistic Missile (ABM) Treaty to expressly permit advanced theater missile defenses were kept off the Senate's calendar for fear of their rejection by Senate Republicans who wished to kill, rather than update, the ABM Treaty. The Cold War's end not only widened the domestic political divide over the ABM Treaty, but also over the utility of nuclear weapons, a division symbolized by the Clinton Administration's fixed pursuit of the Comprehensive Test Ban Treaty, and the uncompromising rejection of the treaty by Senate Republicans.

By the end of the 1990s, the unraveling of the domestic U.S. consensus behind the twin pillars of MAD—huge offensive nuclear arsenals and a treaty-bound prohibition against national missile defense—was virtually complete. Treaty making lost bipartisan support when the Soviet Union collapsed and when the CTBT appeared to constitute a threat to the U.S. nuclear stockpile. When Senate Republicans voted against ratification of the CTBT, mostly in deference to future stockpile needs, they badly damaged the structural foundation for international control over

nuclear weapons. Another support structure for strategic arms control, the ABM Treaty, was barely standing at the end of the Clinton administration.

Tearing down this tottering structure was fraught with risk, since most of the international community had come to rely upon it, and since the collapse of strategic arms control would likely spread to nonproliferation regimes, with incalculable effects. Domestic paralysis on strategic arms control compounded these difficulties. By the time President George W. Bush assumed office, a familiar form of strategic stalemate was in place: while Republicans could negate treaties, Democrats could take blocking action against the favored remedies of treaty foes. This wave of strategic stalemate was familiar, and yet far more serious than previous manifestations. To begin with, George W. Bush and his advisers had far more freedom of action than their hawkish predecessors. The demise of the Soviet Union and pronounced U.S. international primacy emboldened them to walk away from treaties. During the Cold War, Hawks and Doves agreed over ends while disagreeing over means. With the end of the Cold War, partisans disagreed over ends as well as means. Conceptualists at one end of the political spectrum envisioned cooperative security; the other end championed the hard-edged, unapologetic maintenance of U.S. strategic superiority. The familiar contest between Hawks and Doves had now morphed into a divide between Dominators and Conciliators. Conciliators found themselves in the untenable position of defending MAD, while Dominators bashed MAD, and plotted the resumption of nuclear testing and the seizure of the high ground of space. Neither posture held much appeal to an American public that, when not disinterested, wanted favorable outcomes without negative consequences.

## RECONCILING COMPETING IMPULSES

Public confusion deepened amid the contradictory conditions of American strategic superiority. The dichotomies of the Cold War were fairly clear. In the decade after the demise of the Soviet Union, contradictory tendencies became transposed. Globalization produced alienation, and power generated vulnerability. These dialectics also applied to nuclear weapons, missile defenses, and strategic arms control. Firmly-held belief systems were undone by asymmetric threats, but the objects of prior belief were too central to be discarded. Opinion polls reflected this duality: The American public wanted missile defenses as well as the comfort of treaties and nuclear deterrence—

as long as the latter came without detonations and with deep cuts.

These mixed impulses could be reconciled—but not under the umbrella of MAD. Many elements of a new strategic concept began to take shape during the first decade after the Cold War, but did not cohere because political conditions were not ripe for synthesis. Republicans and Democrats alike on Capitol Hill readily acknowledged that the START accords did not go far enough in reducing force levels. Support was also evident across the political spectrum to rely increasingly on informal and more flexible arrangements. Many called for reducing the alert status of nuclear forces, and no senior government official or military officer could convincingly explain why, a decade after the Soviet Union dissolved, thousands of nuclear weapons remained on “hair trigger” alert. The post-Cold War U.S. nuclear war plan also remained incomprehensible and ripe for revision. Targeting lists were down-sized, but not fundamentally rethought and explained to the U.S. public.

Most important of all, a new practice, born of necessity, began to safeguard the dangerous weapons and materials residing in the former Soviet Union. These cooperative threat reduction efforts, initially championed on Capitol Hill by Senators Sam Nunn and Richard Lugar, were soon affixed with an acronym—CTR—which begat additional acronyms as new initiatives were spun off to address the multiple problems attendant to the Soviet Union’s demise. CTR programs retained consensual support because they proved their worth in readily understood ways. At the century’s end, CTR programs in the former Soviet Union secured the deactivation of over 5,000 nuclear warheads and many hundreds of launchers for an inter-continental nuclear attack. Further assistance was provided for the storage and transportation of nuclear weapons. Construction proceeded on a large, secure fissile material storage facility. The United States helped to improve the safety and security at Russian chemical weapons storage sites. Security upgrades were implemented for hundreds of metric tons of highly enriched uranium and plutonium. Radiation detection equipment was installed at Russian border crossings to help detect and interdict nuclear smuggling. Plutonium-laden fuel rods from nuclear power reactors were secured.

Cooperative threat reduction was potentially an open-ended pursuit, bounded by the political contours of U.S.-Russian relations, bureaucratic mind sets and financial

constraints. Taking the lead in this effort was the Pentagon, which helped to dismantle aging Soviet-era nuclear forces, and the U.S. nuclear weapon labs, which devised collaborative programs with their counterparts in Russia to protect fissionable material once used in bomb programs. The leadership roles in co-operative threat reduction played by the Departments of Defense and Energy were absolutely essential. Had these efforts been led by the Department of State and the now-defunct Arms Control and Disarmament Agency, they would have been politicized and hopelessly underfunded during the 1990s. Successful efforts required the backing of more powerful and better funded sponsors. To be sure, the pursuit of CTR initiatives by agencies with institutional interests in the perpetuation of U.S. nuclear weapons and force levels led to awkward juxtapositions, but these mattered less than the new practices undertaken between former adversaries.

Cooperative threat reduction initiatives grew as the intellectual and political capital behind strategic arms control was shrinking. The Clinton administration added dramatically to this shift in capital flows by building considerably on Nunn-Lugar initiatives while proceeding quite tentatively on strategic arms control accords inherited from the administration of George H.W. Bush. Quietly, without much fanfare and below the horizon of partisan debate, the daily practice of cooperative threat reduction became the primary means of reducing the dangers associated with weapons of mass destruction (WMD). While bilateral treaties were tied up in the politics of ratification, legislative conditions, and domestic division, cooperative threat reduction initiatives expanded. CTR initiatives grew in importance as bilateral and multilateral treaty talks lost traction.

## **BUSH’S NEW VISION**

The inauguration of President George W. Bush sealed the rejection of MAD as a central organizing principle for strategic arms control. But what would replace it? On May 1, 2001, President Bush delivered a speech at the National Defense University calling for a “clear and clean break” with past and challenging Americans and foreign nationals to “rethink the unthinkable.” Bush placed Capitol Hill and foreign capitals on notice that the ABM Treaty prohibiting national missile defenses would be replaced with “a new framework.” Within this new strategic framework, formalized and lengthy treaty texts would play a

much smaller part, while unilateral or parallel steps would gain new prominence.<sup>4</sup>

One key element of the new strategic framework clearly involved significant reductions in deployed strategic forces. After much back and forth with the Pentagon, Bush publicly committed the United States to reduce deployed strategic forces to between 1,700 and 2,200 warheads over a ten-year period. These were notable cuts, but they still fell short of Bush's promised "clean" break with the past. Much continuity remained with nuclear targeting plans, as creative accounting methods were employed by the Pentagon to protect U.S. force levels. As a result, the Bush administration's much heralded strategic arms reductions were hardly different from those agreed four years earlier by Clinton and his Russian counterpart Boris Yeltsin in a projected START III accord. In one respect, Bush's proposed cuts are inferior, since they permit the retention of quick-strike, land-based missiles carrying multiple warheads.

Even with Bush's promised reductions, thousands of nuclear weapons would remain in place over the first decade of the 21st century, either on deployed forces or in storage, where they could be reconstituted, if deemed necessary. This posture hardly qualified as a radical break from Cold War concepts of nuclear deterrence, since residual nuclear capabilities remained so high. A wide range of military, political and economic targets can be struck in the event of a nuclear war with devastating effect. In other words, the down-sized nuclear deterrence posture envisioned by the Clinton and Bush administrations still conformed to the precepts of assured destruction of the Russian and Chinese target sets, since these adaptations did not fundamentally alter the punishing character of the threat.

While there was much continuity to the Bush administration's strategic offensive posture, the most notable changes involved the rejection of treaties, the inclusion of non-nuclear strike capabilities to war-fighting plans, and the projected overlay of missile defenses. The net result of these changes will not be reassuring to Moscow and Beijing. Deterrence without reassurance can be a dangerous condition among major powers. Moscow, and especially Beijing, might be forgiven for wondering whether Mutual Assured Destruction had now been replaced by Unilateral Assured Destruction in the Bush administration's plans. This conjecture will either be given credence or will be undercut by subsequent decisions regarding nuclear

testing, space warfare, and the design and scope of national missile defenses.

If the void created by treaty trashing is filled by U.S. efforts to devalue or negate the nuclear deterrents of Russia and China, we are in for a very difficult passage, indeed. Is this what President Bush had in mind when he called for a "clear and clean break from the past?" Or will subsequent steps by the Bush administration reflect the promise of his National Defense University speech, in which he declared that "[t]oday's Russia is not our enemy," and called for a "new cooperative relationship" with Moscow, one that "should look to the future, not to the past. It should be reassuring, rather than threatening. It should be premised on openness, mutual confidence and real opportunities for cooperation."

### A NEW CONSTRUCT

The Bush administration's plans will become clearer in due course. In the meantime, it is incumbent upon its critics to conceptualize a positive construct to fill the void created by the weakened state of strategic arms control and nonproliferation treaties. What alternatives are proposed for new nuclear weapons testing, space warfare, and oversized national missile defenses? The construct needed to fill this void must be pragmatic and yet visionary. It must generate hope, forward direction, and an increased sense of reassurance in difficult times.

The positive complement to nuclear deterrence during the Cold War was strategic arms control accords that bounded and reduced threats posed by ocean-spanning nuclear strike forces. These accords continue to have utility, but they are now peripheral to the primary security threats of the post-Soviet period, which relate to the safeguarding, reduction, and elimination of dangerous weapons and materials. The need for a positive construct to fit alongside deterrence, preventive diplomacy, and coalition warfare became even greater with President Bush's decision in December 2001 to abrogate the ABM Treaty.

President Bush's proposed deep cuts did not begin to fill this void, since residual nuclear capabilities would remain so high. Nor could Bush's vaguely-defined mix of missile defenses and nuclear deterrence fill this void, since the eventual mix might diminish international cooperation and fuel proliferation. If, for example, Russia and China—the states whose help is most needed to control, reduce, and eliminate dangers in troubled regions—feel threatened by the U.S. mix of missile defense and nuclear offense,

they will surely withhold or limit the scope of their cooperation.

Put another way, the deployment of national missile defenses or weapons in space that could devalue or negate the Russian and Chinese nuclear deterrents would be conducive to joint cooperation against the United States. Different missile defense architectures could, however, have positive net effects. There is little doubt but that theater missile defenses have become essential for U.S. engagement in military operations in tense regions where potential adversaries can threaten allies and U.S. forward-deployed troops with missile attacks. A ballistic missile defense of the United States is far less pressing, since this is among the least likely threats the United States now faces. Nonetheless, a modest insurance policy in the form of limited national missile defense deployments need not be unwise nor incompatible with cooperative threat reduction—if the insurance premiums remain consonant with the modesty of the threat.

Uncontested U.S. strategic superiority is a fact of life in the post-Cold War era. This surprising gift must be applied wisely against a new constellation of threats to national, regional and international security. Alternative postures are now being defined that elaborate how American superiority can be successfully extended and applied. There is little debate in the United States over the utility of improved power projection, unconventional warfare, and intelligence capabilities. The asymmetric threats to U.S. national security require such tools. Rather, the emerging debate centers around how much America should rely upon diplomatic versus military instruments, how fast and how far to prosecute offenders, and whether to add robust national missile defenses and the weaponization of space to the existing panoply of U.S. strengths.

A wide range of military initiatives that strengthen U.S. diplomacy, coalition building, and collective efforts to counter proliferation will receive consensus support, while there will be intense debate over initiatives that seek to extend U.S. military superiority in ways that weaken American diplomacy, arms control norms, and alliance ties. The arguments ahead are not about the continuance of U.S. military superiority; they are about the most useful instruments to combat proliferation, dangerous international actors, and unconventional threats.

Unconventional threats are unlikely to be deterred by the introduction of national missile defenses and the weaponization of space. The most likely threats to U.S.

national security come from below the horizon, as noted by the U.S. intelligence community. Moreover, Moscow and Beijing would view these initiatives as war-fighting adjuncts to deterrence or as instruments of U.S. compellence. Adding many hundreds of national missile defense interceptors and the weaponization of space to the thousands of deployed or deployable nuclear weapons would be akin to putting U.S. nuclear deterrence on steroids. Opponents of the ABM Treaty have long sought these initiatives, but were blocked during the Cold War by Soviet military power. The demise of the Soviet Union is an insufficient reason to pursue such an escape from mutual deterrence now, especially when to do so would accelerate the unraveling of treaties, accentuate of domestic and international political divides, and make cooperation with Moscow on proliferation concerns more remote.

The displacement of MAD through national ballistic missile defenses sized to devalue or negate the Russian and Chinese nuclear deterrents is bound to backfire, as are future U.S. initiatives to weaponize space. Instead, the successful extension and application of U.S. strategic superiority requires a positive and collaborative complement to deterrence, power projection capabilities, and preventive diplomacy. The void created by the inapplicability of MAD and the weakening of treaties in an era of asymmetric warfare needs to be filled with a new strategic concept. This new strategic concept is in plain view, because the United States has practiced it successfully, albeit in an overly bureaucratic and segmented way, over the past decade. It is called cooperative threat reduction.

## **COOPERATIVE THREAT REDUCTION IN A NEW ERA**

The time is ripe to elevate the varied practices of cooperative threat reduction to a central organizing principle for dealing with the combined dangers associated with the demise of the Soviet Union and the rise of asymmetric warfare. Cooperative threat reduction—as a process for engagement and for implementing specific WMD control and elimination programs—provides the positive construct needed to meet the leading security challenge facing the United States: keeping dangerous weapons and materials out of the hands of those ready to use them. The shift from a MAD-based structure of strategic arms control to one based on cooperative threat reduction is already well underway. The need for this transition, and the difficulty of achieving it, have be-

come more apparent after the tragic events of September 11, 2001.

The concept of cooperative threat reduction is far too important and useful to be confined to the former Soviet Union. Instead, CTR-related activities can and should be employed in other troubled regions, wherever dangerous weapons and materials are being held by states that are willing to forego them in return for economic or security assistance. The practical application of cooperative threat reduction to contain, reduce and eliminate dangerous weapons and materials should extend as far as political adroitness and financial backing will allow.

Cooperative threat reduction is a full-service concept, covering the entire spectrum of post-Cold War dangers, ranging from the control of dangerous materials at the source to the dismantlement of deployed strategic weapon systems. As such, these programs provide direct and effective linkages between strategic arms control and nonproliferation accords. During the Cold War, CTR programs were an adjunct to treaties; now treaties will struggle to maintain co-equal status with cooperative threat reduction. The two work best in concert: CTR initiatives are easiest to implement when backed up by treaty-based obligations for transparency and arms reduction. A cavalier approach to treaties makes CTR initiatives more essential, but also more difficult to implement.

Strengthening deterrence with missile defenses still leaves a dangerous void in U.S. national security policy. Deterrence, however defined and reinforced, does not progressively reduce and eliminate dangerous weapons and materials; cooperative threat reduction programs do. Cooperative threat reduction, writ large, therefore is as central a component of U.S. national security policy as deterrence or preventive diplomacy.

The elevation of cooperative threat reduction as a central organizing principle for reducing dangers associated with WMD can also clarify missteps in the pursuit of deterrence. Successful cooperative threat reduction requires the progressive diminishment of the salience given to WMD. If the strongest nation on the planet needs to fine tune nuclear weapons to fight proliferation, the fight against proliferation will be lost. Consequently, the low-profile maintenance of the U.S. nuclear deterrent facilitates CTR; the design of new nuclear weapons and the resumption of underground tests will produce quite different and pernicious effects. Likewise, successful cooperative threat reduction requires collaboration with Russia and China.

The development of rules of the road to prevent the weaponization of space is likely to expand the scope of CTR; the impulse to deploy anti-satellite weapons on earth or weapons in space will likely curtail the scope of Russian and Chinese cooperation.

Cooperative threat reduction techniques can also facilitate collective steps by states that wish to set higher standards for implementing treaty obligations. Multilateral accords governing nuclear, chemical and biological nonproliferation and disarmament were painstakingly constructed during the Cold War. These accords aimed for universality at the cost of rigorous enforcement. Universality is a critically important principle for strengthening global norms and for isolating miscreants who seek or use weapons of mass destruction. But these treaties are not very helpful in dealing with member states that use treaties as a cover to covertly develop and produce prohibited weapons. Nor do universal treaty regimes lend themselves to strengthening measures, because some joiners are unwilling to accept tighter controls. Even when many states are willing to tighten standards, procedural hurdles make it virtually impossible to do so. And when states were willing to accept surprisingly stringent monitoring standards, as in the case of the Chemical Weapons Convention, they were subsequently weakened during the implementation phase. With the exception of the CTBT, universal treaty regimes apply lax monitoring standards to stringent obligations. Stringent monitoring and proper treaty implementation are essential elements of cooperative threat reduction. Covert WMD programs flourish in their absence.

Voluntary associations of member states that wish to strengthen multilateral treaty regimes can do so by agreeing to implement cooperative threat reduction initiatives. These voluntary associations would be open to any state that wishes to join. The only requirement for being a member of this club would be a willingness to accept higher standards of demonstrating good faith. In return, members of the club could provide each other with certain benefits that are withheld from nonmembers, such as trade in "dual use" items that could have both civilian and military applications. Such preferential trading arrangements are often characterized as "discriminatory" and harmful to treaty regimes by states unwilling to accept higher standards. But there is nothing discriminatory about membership in a voluntary association that is open to every state. Abstainers harm treaty regimes far more than joiners to these voluntary associations.



Bilateral treaty regimes between the United States and the Russian Federation could also benefit from cooperative threat reduction techniques. Deep reductions that are pursued alongside treaty obligations are one form of CTR. As reductions proceed, transparency measures and comprehensive cradle-to-grave controls over fissile material become more essential. At least in the near term, these arrangements are more likely to be realized through CTR techniques and voluntary associations than through new treaty obligations. Over time, a broad web of CTR initiatives could become intertwined with treaty regimes, if both states wish to translate higher standards into treaty obligations.

The scope of bilateral CTR activities will depend on many factors, not the least of which is the degree of comfort each party has with the strategic objectives of the other. In this context, reassurance and transparency matter even more than deterrence. The value of bilateral accords, negotiated with heroic effort over many decades of Cold War strife, rests now, in vastly altered circumstances, primarily in the reassurance they provide to the weaker party, whose cooperation is needed for CTR to expand and deepen. The ABM Treaty provisions protecting observation satellites and the START obligations for intrusive inspections have lost none of their utility with the end of the Cold War; indeed, they remain essential to facilitate CTR activities.

Unilateral steps to withdraw from treaties make cooperative threat reduction harder to accomplish. Conversely, cooperative threat reduction measures are easiest to implement as adjuncts, rather than as alternatives, to treaty regimes. For example, the steps taken by Presidents George H.W. Bush and Mikhail Gorbachev removing from the field the least safe and secure nuclear weapon designs followed just two months after completion of START I in 1991. It would be difficult to imagine the successful choreography of these extraordinary moves to reduce nuclear dangers in the absence of a reassuring network of treaty constraints.

The demise of the Soviet Union and the rise of asymmetric threats present a welcome new opportunity to reconceptualize strategic arms control. The quest to replace MAD-based treaty regimes with a more positive construct was sidelined during the Cold War, when treaties codified national vulnerabilities. One of the founding fathers of strategic arms control, Donald G. Brennan, quit the community over this circumstance, arguing that defenses should run free and offenses be tightly controlled.

Brennan's vision of a defense-dominant strategic posture was foiled by technical limitations, the abundance of strategic offensive forces, and long memories of the Maginot Line. With the end of the Cold War, alternative conceptions to (or variations of) MAD, based on a mix of nuclear offense and missile defense, again began to surface. For example, President Clinton's second Secretary of Defense, William J. Perry, floated the idea of replacing MAD with Mutual Assured Safety.<sup>5</sup>

The elevation of cooperative threat reduction to a strategic concept can succeed and flourish alongside the deployment of missile defenses as long as defenses are reassuring to prospective partners. If, however, the deployment of missile defenses is threatening rather than reassuring, the scope of cooperative threat reduction initiatives will be reduced to those programs that are in the economic interest of the weaker party—and no more.

Unlike MAD, the strategic concept of cooperative threat reduction is affirmative. The practice of cooperative threat reduction provides clarity and concreteness to constructive national purposes. The practice of nuclear deterrence often distances the United States from nonproliferation treaty regimes, whereas the practice of CTR bridges strategic arms reduction and non-proliferation treaty regimes. Cooperative threat reduction is much broader than traditional strategic arms control and nonproliferation accords—broad enough to encompass many of the varied threats posed by a new era of asymmetric warfare, including the strengthening of export controls; improving security over WMD stocks and expertise; and reinforcing global norms against WMD use. The collaborative nature of cooperative threat reduction reinforces U.S. efforts to build international support for the broader war on terrorism. CTR is not a solution to all security dilemmas or a substitute for the use of force, when necessary. Instead, these programs can reduce security dilemmas and diminish threats facing the United States and the international community.

Elevating and expanding the practice of cooperative threat reduction to a strategic concept would reflect and connect the duality of contemporary conditions, where strength does not necessarily provide protection, and where weakness often constitutes the most dangerous threat. Conception and practice must be flexible enough to adapt to fluid circumstances, and yet fixed on broad goals that enable international cooperation as well as domestic support.

The central purpose of this essay is to generate new thinking about a positive strategic concept to accompany deterrence, diplomacy, and superior U.S. military capabilities. The argument presented here is that cooperative threat reduction has far greater utility than our limited conceptions of it. We have unwisely pigeon-holed CTR programs into budgetary line items and bureaucratic functions. These creative, visionary, and yet practical initiatives have far greater worth than we have so far assigned. Properly conceived, integrated, and managed, cooperative threat reduction is no less of a strategic concept than nuclear deterrence or preventive diplomacy in guiding U.S. national security policy safely through a dangerous world of asymmetric threats.

<sup>1</sup> The author wishes to thank Leonard Spector for his helpful editorial comments.

<sup>2</sup> Henry A. Kissinger, *The Necessity for Choice: Prospects of American Foreign Policy* (New York: Harper's, 1961); Bernard Brodie, *Strategy in the Missile Age* (Princeton: Princeton University Press, 1959); Thomas C. Schelling and Morten Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1966); Hedley Bull, *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age* (New York: Praeger, 1965); Donald G. Brennan, ed., *Arms Control, Disarmament, and National Security* (New York: G. Brazillier, 1961).

<sup>3</sup> Herman Khan, *Thinking About The Unthinkable*, (New York: Horizon Press, 1962), p. 13.

<sup>4</sup> White House Office of the Press Secretary, "Remarks by the President to Students and Faculty at National Defense University," May 1, 2001, <<http://www.whitehouse.gov/news/releases/2001/05/20010501-10.html>>.

<sup>5</sup> Henry L. Stimson Center, "Award Presentation to Secretary of Defense William J. Perry," September 20, 1994, p. 16.