The Return of Dr. Strangelove

How fiscal austerity will push the United States towards nuclear arms and cyber-warfare.

With the prospect of sequestration looming, the United States may find itself increasingly relying on nuclear and cyber deterrence as an affordable means of guaranteeing national sovereignty and preventing major conflict between the U.S. and potential adversaries in the Asia-Pacific. While earlier defense planning and acquisition were based on economic conditions that no longer exist, Congress's options to balance the budget by cutting defense spending are politically palatable because far fewer American are "defense voters" relative to "social welfare voters," according to a number of recent public opinion surveys.

The simple fact is China's rise has yet to present a clear danger to American interests in the minds of most Americans.

The first steps in this process are already underway and exemplified by the administration's new strategy—published in January 2012. When the official requirement that the Department of Defense (DoD) be able to fight two major wars simultaneously disappeared, an opportunity to downsize the armed forces presented itself. From Congress's viewpoint, the budget crisis must be solved without unseating its members. Ironically, austerity may cause Americans to stop worrying about a hypothetical rogue detonation and learn to love the bomb. Dr. Strangelove may return with a vengeance, but this time with a cyber doomsday device under one arm and its nuclear counterpart under the other. After all, dollar for dollar, nuclear weapons—in particular—provide American taxpayers the greatest level of security and stability of any weapon the nation has ever fielded. The fact that at an estimated $30 billion per year—5% of the defense budget—the nuclear arsenal is cheap, may spur Congress to take a pragmatic position toward the nation's most powerful military capabilities (as the federal budget is increasingly engulfed by social welfare programs) and support an effective nuclear deterrent along with the development of devastating cyber capabilities.

It is important to keep in mind that both areas—nuclear and cyber—are a primary focus of Chinese military developments. Failing to maintain an advantage in both may prove unwise for the United States.

Some in the scientific community argue that this perspective is unrealistic. Politics, being what they are, is all about getting elected; complex strategic calculations in the Asia-Pacific offer little comfort during a tough reelection fight that is focused on the domestic economy. With Congress having a number of incumbents whose constituencies loathe the thought of cuts to Medicare, Medicaid, Veterans’ benefits, and Social Security, taking greater risks in national security is a more tangible option. As the nation borrows over $1 trillion per year, the quest to balance the budget is impossible without dramatic spending cuts given the unacceptability of tax increases.

The nation’s deficit crisis may soon turn the United States’ geopolitical posture from one that is ideologically based on global interventionism—popular with both Republicans and Democrats—to one more akin to defense non-intervention. While international trade will continue and expand, the United
States may cease to be a shining city upon a hill and the global policeman. It is somewhat paradoxical that after the country demonstrated overwhelming conventional superiority in the last two wars—Afghanistan and Iraq—the cost of that capability may lead to a renaissance of nuclear deterrence and the development of cyber deterrence as a strategic policy, a move that may be more useful in an “Asia-Pacific century” than many realize. In comparison to large conventional forces and the decades of veteran’s benefits that follow, the nuclear arsenal is far more affordable over the long term. Cyber is also more cost effective when it comes to R&D and expensive acquisition programs.

With a per-unit price estimated at about $4 billion, a new Ohio-class-replacing nuclear ballistic missile submarine (SSBN-X) can produce strategic deterrence for less than an army division of 10,000 career soldiers whose compensation—with pensions and benefits—continues for an additional 40 years after these soldiers have served. A key policy driver in coming years may prove to be the limited costs of upgrading and maintaining existing nuclear weapons when a cash-strapped federal government seeks to reduce the deficit. Maintaining and upgrading existing nuclear weapon systems is inexpensive by comparison. Even if nuclear weapons are bound—as Kenneth N. Waltz states—to make people uneasy because of their immense destructive power, nuclear arms may prove to be a budgetary emergency exit.

For many Americans, Peter Sellers’s portrayal of nuclear deterrence policies in the 1950s and 1960s remains a reality. While Dr. Strangelove (1964) is an iconic film, its black comedy addressed the dangers of nuclear weapons, doomsday devices, missile gaps, and the intricate webs of deterrence and geopolitics of a bygone era where the world was still coming to grips with the destructive power of “the bomb.” In one scene, Dr. Strangelove carefully explains for the president deterrence and the doomsday device saying, “Mr. President, it is not only possible, it is essential. That is the whole idea of this machine, you know. Deterrence is the art of producing in the mind of the enemy the fear to attack.”

Admittedly, this psychological aspect has not changed, but technology and operational experience have made nuclear weapons a safe and secure means of deterring conventional and nuclear attack, which may prove critically important in deterring an increasingly assertive China. It is cyber deterrence that is in a similar position to where nuclear deterrence was at the time of Dr. Strangelove.

After a generation of neglect, deterrence, in its broadest meaning, is experiencing an overdue renaissance among scholars and policy wonks. For those advocates of nuclear zero who thought conventional precision attack would serve as a panacea for the nation’s security challenges, the past twenty years were a disappointment. They failed to deter a number of adversaries America has fought over the last two decades. Most importantly, they have proven all too expensive and are not deterring a rising China, a resurgent Russia, or an unpredictable North Korea.

Budgetary Realities

Despite disengaging from Iraq and the start of reductions in Afghanistan, the federal budget has a trillion dollar plus deficit. And with the 2012 defense and national security budgets equaling 63% of discretionary spending, cuts are likely to come to defense many times in the future. Cuts of 25% or more have an historical precedent and the examples that exist where the warfare and welfare state collide are inevitably won by the welfare state.

Dwindling Conventional Forces

Policy makers are realizing there is a limited return on investment when using a counterinsurgency (COIN) military strategy to occupy foreign countries. Two schools of thought in national security have been vying for preeminence in the post-Vietnam era. The First, as embodied by the Weinberger Doctrine, suggests that the U.S. should only employ military force in conflicts with: an expected outcome, a given duration, public support, and where vital national interests are at stake. In short, realism is seeking to reassert itself. In such a way of thinking, there are no proverbial land wars in Asia. The second and, at least within the Beltway, more dominant view advocates employing economic and military power to accelerate the inevitable
expansion of democracy. President Bill Clinton's globalization and President George W. Bush’s doctrine of preemption are two sides of the same coin.

This latter school of thought gave Americans Somalia, Bosnia, and Kosovo during the 1990s and Afghanistan and Iraq in the 2000s. While the nation’s military took an “acquisition holiday” during the 1990s, the 2000s saw defense spending increase dramatically in an effort to fight two wars. And while the Iraq war is over and Afghanistan is winding down, the bill for replacing the nation’s worn-out aircraft and ships is leaving Congress with sticker shock.

Personnel are also an expensive asset. With the largest number of personnel, the Army represents a third of defense costs. It is likely that the nation’s occupation force will be the prime target for reduction in size and capability and rightfully so. It was the Army that grew by almost 20% to meet the demands of Iraq, and it is the Army that should shrink in its aftermath. This is not an issue of inter-service rivalry, but a question of shifting strategic threats. The Marine Corps also grew during the 2000s and must also return to pre-conflict levels. For the Navy and the Air Force, the past decade was a hard time because acquisition dollars went to fight the wars in Afghanistan and Iraq instead. Absent the services and the DoD finding a way to bring down acquisition costs, this decade may prove even tougher as defense spending is increasingly squeezed by entitlement growth.

With all of the previous doom and gloom assessments, realist advocates of the nuclear arsenal have an opportunity to offer a different and more cost effective vision for national security, but it must include cyber. First, and most importantly, they must overcome Washington’s predilection toward costly action and offer a compelling case for restraint on a grand scale. By in large, China has given the United States a model for such restraint—thus far. Second, they must move beyond nuclear deterrence and offer a full spectrum of deterrence options, with cyber deterrence the central addition.

**Cyber Deterrence**

Had Dr. Strangelove been an advisor and scientist in today’s Department of Defense, it is certain that cyber deterrence would play a central role in his deterrence thinking. With cyberspace all the rage within the national security community, it should come as no surprise that cyber deterrence is a rapidly developing area of opportunity. While cyber weapons lack digital lethality (so far), the ability to kill other systems and create havoc in an adversary’s society—with significant human suffering as a side effect—creates the potential to deter an adversary. Deterrence is built on the certainty that a response to one’s actions will outweigh the potential gains of taking those actions.

While it is true that cyber weapons have yet presented a visible threat of mass destruction—as nuclear and conventional arms have—this is changing. It is important to understand both the options embedded in cyber deterrence and the actions that are feasible. Cyber weapons have global reach at a limited cost, but questions remain about their actual lethality and attribution.

After the Stuxnet attack in which malicious code entered the computer networks of the Iranian nuclear program and physically destroyed equipment by manipulating operating speeds, the legal community started a review of cyber weapons. According to some international legal theorists, there was no control over where, how, and when Stuxnet proliferated in computer systems. Therefore, it was assumed that it could create civilian harm and in doing so would become illegal by international law standards. A combination of the absence of destructive power and the soon-established precedence that cyber weapons are not precise military targets and, therefore, in conflict with international law, erode the opportunity of replacing conventional deterrence with cyber deterrence preparing the way for further reliance on nuclear deterrence. Thus, cyber deterrence is in need of significant development. This is particularly important because of the vast penetration of American private and public sector networks originating from China. Thus far, the United States has found no effective way to deter such attacks.

**Nuclear Deterrence**
In the coming decades, nuclear arms can play a greater role in comparison to the last two decades. They are the only weapons that project power from Montana to Macau simultaneously, without moving military hardware or personnel. Political theorist Kenneth N. Waltz argued that the power of nuclear arms lies in not what you do with them, but what you can do; an argument he was not alone in making. Under severe budgetary pressures, nuclear arms maintain the nation as a great power regardless of economic, cultural, or other influence—a point the Chinese, North Koreans, and Russians understand well. This reasoning also led the United Kingdom to make building nuclear-capable submarines a priority, even after the deepest defense cuts since the post-World War II drawdown.

Reliance on nuclear arms to maintain geopolitical equilibrium is visible in Siberia and Russia’s Far East, where a resource-rich wilderness borders a resource-craving China. Russia’s ability to defend and uphold the territorial sovereignty of its Far East relies heavily on nuclear arms. Nuclear arms are returning as a tool of power—even if incrementally.

**Boom Time for Boomers, Bombers, and Ballistic Missiles**

Austerity and extensive defense budget cuts are triggering renewed interest in the nuclear triad. While the price of boomers, bombers, and intercontinental ballistic missiles (ICBM) may seem relatively high, at less than 10% of the defense budget, both figuratively and literally they offer the greatest bang for the buck. Nuclear submarines project awe-inspiring and stealthy power beyond the force any armored division or army corps can ever achieve. Bombers allow the president to signal adversaries in a way submarines and missiles cannot. ICBMs increase the threshold for launching an attack against the United States by forcing an adversary to attack the homeland should they seek to destroy our ability to return fire. While the triad may, at first glance, have appeared expensive and outdated after the Cold War, a fiscally constrained military that seeks to maintain stability across the globe requires a robust arsenal as means to preventing great powers from beginning and/or escalating conflicts that could go nuclear. In short, they deter and limit great power conflicts, which have proven costly for the United States.

**Affordable Deterrence**

The United States has no other option than to seek innovative ways to decrease defense costs without losing deterrent power and risking national security. Henry Kissinger once argued that “The absence of alternatives clears the mind marvelously.” The future of American deterrence will be connected to affordability. After the era of endless money, as Robert Gates calls the years after 9/11, there are tough decisions to make at the start of the Asia-Pacific century. Even if defense cuts are imminent, there are several advantages for the U.S. that can be exploited to achieve affordable defense; the nuclear arsenal being the most important one.

Despite advances in technology the U.S. still enjoys geopolitical advantages. For example, the Pacific and Atlantic oceans protect the country from a variety of conventional military threats. In comparison to other nations, the country is safe geopolitically. The cost to defend the homeland is far less than conducting large-scale, counterinsurgency operations in remote countries—in invade, occupy, and rebuild. In general, neighbors to both north and south are friendly.

From a long-term financial viewpoint, defense focused on the American homeland requires a smaller land force in comparison to the present one. With deterrence, intelligence, and the ability to intercept incoming aircraft or missiles enabled by systems that are capital intensive and sophisticated, fewer personnel are required to defend the homeland and protect American interests in Asia.

According to Waltz, deterrence is what you can do, not what you will do. Throughout history, adversaries have taken steps toward each other that escalated quickly because they underestimated the options and determination of the other based on the presence of resources of war at hand. Because of this, it is important that America is clear about its intentions and capability.
The United States is the only nation that has used nuclear arms at war when it eradicated two Japanese cities at the end of World War II. None have yet to employ the nuclear option—an all-out attack, in cyberspace. America is, after all, the only nation that has used nuclear weapons—credibility that should not be frittered away. For any potential adversary, it is a lethal fact. America are likely able in near time to create disproportional digital exploitation responses (DDER) to any power that crosses the line and challenge U.S. cyber supremacy with significant destabilizing effect on the targeted society. It might not color the minds of the current American leadership, but it influences foreign leaders. Deterrence relies upon will and capability. If the United States can no longer deter with conventional forces; international sanctions are ineffective; and coalition building is beyond others’ financial reach; nuclear deterrence becomes the primary upholder of strategic deterrence. When austerity removes other strategically deterring options and the United States is left with nuclear deterrence, Dr. Strangelove and his doomsday machines (cyber and nuclear) can make their triumphal return.

America’s ability and willingness to wage all-out war is validated by strategic deterrent patrols, bombers sitting on alert, launch-ready missiles, and an offensive cyber-Armageddon capability. With these assets ready to reach global targets, deterrence can be successful. No matter whether we want it, believe it, like it, or imagine it, federal austerity will force radical change in the nation’s defense posture, which is likely to lead to a greater reliance on nuclear and cyber arms. Succeeding in Asia will depend upon the United States realizing its position sooner rather than later.

Dr. Jan Kallberg is assistant professor in Homeland Security at Arkansas Tech University and a researcher at Cyber Security Research and Educational Center, Erik Jonsson School of Engineering and Computer Science at The University of Texas at Dallas.

Dr. Adam B. Lowther is a member of the faculty at the U.S. Air Force’s Air University. The views expressed are those of the author.

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For inquiries, please contact The Diplomat at info@the-diplomat.com