THINK AGAIN: AMERICAN NUCLEAR DISARMAMENT

A smaller atomic arsenal isn’t just wishful thinking—it’s bad strategy.

BY MATTHEW KROENIG
"Nuclear Weapons Are Cold War Relics."

**NOT SO.**

When the Soviet Union collapsed in 1991, the era of nuclear competition seemed to be at an end, and the United States and Russia began to get rid of many weapons they had used to threaten each other for more than 40 years. In 1967, the size of the U.S. nuclear arsenal peaked at 31,255 warheads, but by 2010, under the New Strategic Arms Reduction Treaty (New START) signed with Russia, the United States had promised to deploy no more than 1,550.

In June of this year, U.S. President Barack Obama announced his intention to go even lower, to around 1,000 warheads—a move that would leave the United States with fewer nuclear weapons than at any time since 1953. What’s more, influential figures around the world, including erstwhile American hawks, have increasingly supported steps toward total disarmament. In his major 2009 address in Prague, Obama committed “to seek the peace and security of a world without nuclear weapons.”

Nuclear reductions and the heady dreams of abolition are driven in part by a belief that nukes are Cold War anachronisms. But it would be incorrect—dangerous, in fact—to assume that the conditions that have allowed the United States to de-emphasize its atomic arsenal will persist. Nuclear weapons are still the most potent military tools on Earth, and they will remain central to geopolitical competition. They have been relatively unimportant in the recent past not because humanity has somehow become more enlightened, but because we have been blessed with a temporary respite from great-power rivalry.

The Soviet Union’s collapse left the United States as the world’s sole superpower, and America’s unmatched conventional military overshadowed other countries. Nuclear weapons have not been central to America’s national security for the past two decades because its primary foes—Serbia, Iraq, Afghanistan, and al Qaeda—did not have them. Whatever America’s problems in prosecuting its recent wars, a lack of firepower was not one of them.

But times are changing. Economists predict that China could overtake the United States as the world’s largest economy in the coming years, and international relations theory tells us that transitions between reigning hegemons and rising challengers often produce conflict. Already, China has become more assertive in pursuing revisionist claims in East Asia, confronting America’s allies, and building military capabilities—including anti-ship ballistic missiles and submarines—tailored for a fight with the United States. In September 2012, a dispute between China and Japan over the Senkaku Islands nearly caused a war that could have easily drawn in the United States. Beijing’s contested claims to natural resources in the South China Sea and ever-present tensions with Taiwan could also lead to Sino-U.S. conflict. Even relations with Russia, America’s partner in arms control, are becoming more competitive: The civil war in Syria bears every hallmark of a Cold War-style proxy battle. In short, great-power political competition is heating up once again, and as it does, nuclear weapons will once again take center stage.

The writing is already on the wall. Russia, China, India, Pakistan, and North Korea are modernizing or expanding their nuclear arsenals, and Iran is vigorously pursuing its own nuclear capability. As Yale University political scientist Paul Bracken notes, we are entering a “second nuclear age” in which “the whole complexion of global power politics is changing because of the re-emergence of nuclear weapons as a vital element of statecraft and power politics.” Nostalgia for simpler times can be seductive, but the United States needs a nuclear force that can protect it from the challenges that lie ahead.

“It Takes Only a Handful of Nukes to Deter an Enemy.”

**WRONG.**

Advocates of further cuts argue that a secure second-strike capability—the ability to absorb an attack and retain enough nuclear warheads to launch a devastating response—is sufficient
for nuclear deterrence. Although "secure" and "devastating" are imprecise terms, many analysts would say that a few dozen submarine-launched ballistic missiles, each with multiple warheads, is plenty because at-sea subs are difficult to target in a first strike and the firepower provided by, say, 200 nuclear weapons is impressive. By their logic, anything more is "overkill" that can be cut with little loss to U.S. security.

Although it is possible that no sane leader would intentionally start a nuclear war with a state that possesses even a small deterrent force, nuclear-armed states still have conflicting interests that can lead to crises. And it turns out that, contrary to widely held assumptions, the nuclear balance of power is critically important to how such disputes are resolved.

Recently, I methodically reviewed the relationship between the size of a country's nuclear arsenal and its security. In a statistical analysis of all nuclear-armed countries from 1945 to 2001, I found that the state with more warheads was only one-third as likely to be challenged militarily by other countries and more than 10 times more likely to prevail in a crisis—that is, to achieve its basic political goals—when it was challenged. Moreover, I found that the size of this advantage increased along with the margin of superiority. States with vastly more nukes (95 percent of the two countries' total warheads) were more than 17 times more likely to win. These findings held even after accounting for disparities in conventional military power, political stakes, geographical proximity, type of political system, population, territorial size, history of past disputes, and other factors that could have influenced the outcomes.

When the United States operated from a position of nuclear strength during the Cold War, it stopped the Soviet Union from building a nuclear submarine base in Cuba in 1970 and deterred Moscow from increasing support to its Arab allies in the 1967 and 1973 Arab-Israeli wars. By contrast, when the nuclear balance was less favorable to Washington, it was unable to achieve clear victories in crises against the Soviet Union—for example, failing to roll back Moscow's 1979 invasion of Afghanistan.

In a game of chicken, we should expect the smaller car to swerve first. The United States has always driven a Hummer, but it is trading it in for a Prius.

In addition, qualitative evidence from the past 70 years shows that leaders pay close attention to the nuclear balance of power, that they believe superiority enhances their position, and that a nuclear advantage often translates into a geopolitical advantage. During the Cuban missile crisis, American nuclear superiority helped compel Moscow to withdraw its missiles from the island. As Gen. Maxwell Taylor, then chairman of the Joint Chiefs of Staff, wrote in a memo to Defense Secretary Robert McNamara, "We have the strategic advantage in our general war capabilities.... This is no time to run scared." Similarly, Secretary of State Dean Rusk argued, "One thing Mr. Khrushchev may have in mind is that he knows that we have a substantial nuclear superiority, but he also knows that we don't really live under fear of his nuclear weapons to the extent that he has to live under fear of ours."

We see similar patterns in South Asia. When asked years later why Pakistan ultimately withdrew its forces from Indian Kashmir during the 1999 Kargil crisis, former Indian Defense Minister George Fernandes cited his country's nuclear superiority. In the event of a nuclear exchange, he said, "We may have lost a part of our population... but Pakistan may have been completely wiped out."

This may sound crazy. To most people, "But you should see the other guy" would be scant consolation for losing perhaps millions of one's fellow citizens. But the truth is that nuclear war might well be more devastating for one country than for the other, even if both sides can inflict "unacceptable" damage. As Cold War nuclear strategist Herman Kahn wrote, "Few people differentiate between having 10 million dead, 50 million dead, or 100 million dead. It all seems too horrible. However, it does not take much imagination to see that there is a difference."

This is not to argue that leaders of countries with bigger arsenals believe they can fight and win nuclear wars. The logic is more subtle. Nuclear states co-serve each other through brinkmanship. They heighten crises, raising the risk of nuclear war until one side backs down and the other gets its way. At each stage of the crisis, leaders make gut-wrenching calculations about whether to escalate, thereby risking a catastrophic nuclear war, or to submit, throwing an important geopolitical victory to their opponent. If the costs of nuclear war are higher for one state than another, then giving in will always look more attractive to leaders in the inferior position—whatever payoff they might get from escalating would always be offset by a higher potential cost. So, on average, we should expect that leaders with fewer nukes at their disposal will be more likely to cave during a crisis. And this is exactly what the data show.

Competition between nuclear powers is like a game of chicken, and in a game of chicken, we should expect the smaller car to swerve first, even if a crash would be disastrous for both. The United States has always driven a Hummer, but it is trading it in for a Prius, even though games of chicken are likely for decades to come. Rather than cutting its forces, the United States should, as President John F. Kennedy promised, maintain a nuclear arsenal "second to none."

"But Doesn't Superiority Increase the Risk of War in the First Place?"

DON'T BE SO SURE.

It is true that many strategists have long argued that having a nuclear arsenal "second to none" could increase the risk of nuclear war. Their logic is simple: If a state has a "first-strike advantage"—that is, the ability to launch a nuclear attack that disarms its opponent and leaves it relatively vulner-
able to retaliation—then, in a crisis, it might be tempted to start a nuclear war. Alternatively, the weaker state might be tempted to use its weapons first, lest it lose them altogether. By this reasoning, nuclear superiority is dangerous for everyone, and the most stable situation is one in which both sides have survivable arsenals of roughly the same size, leaving both vulnerable.

Today, it is still widely believed that it is a bad idea for the United States to possess a nuclear advantage over Russia, and the Obama administration’s 2010 Nuclear Posture Review identified “strategic stability” as a primary goal. That is why New START and Obama’s proposed follow-on agreement aim for equal limits on the United States and Russia. Some analysts also apply this logic to China, over which the United States has tremendous nuclear superiority. (China is thought to have a mere 50 or so warheads capable of reaching the United States.)

But an American first-strike advantage is just that, an advantage, and arguments that try to make a vice out of a virtue rest on tortured logic. After all, the United States possesses a first-strike advantage against the world’s 184 non-nuclear states, and it doesn’t wring its hands about that. Would Americans be better off if these countries could hold them hostage with nuclear threats? No. Would they feel better if North Korea’s missile tests did not routinely fail, giving the Hermit Kingdom a more reliable ability to nuke Los Angeles? Of course not. Then why is the United States so fearful of pursuing superiority over Russia and China?

The answer often given is that, while the United States can trust itself not to start a nuclear war, it doesn’t want to make a Russian or Chinese leader feel the need to “use or lose.” But this fear is unfounded. A leader in a position of inferiority—inferiority so extreme that his country could be vulnerable to a disarming first strike—has a choice of launching a nuclear war he will surely lose or simply conceding the contested issue. Faced with that choice, there is every reason to believe he will back down. Indeed, this is exactly the dynamic that my research demonstrates. To make any other decision, a leader would have to be either crazy or at the end of his rope. But if either were the case, nuclear parity would, if anything, make him more likely to gamble on nuclear war.

In sum, a U.S. nuclear advantage is a major problem—if you are one of Washington’s adversaries.

“...But a Smaller Arsenal Will Help the United States Discourage Nuclear Proliferation.”

Proponents of deep cuts claim that a smaller arsenal will help the United States stop the spread of nuclear weapons to rogue states and terrorists because having so many nuclear weapons makes it difficult (if not hypocritical) to tell, say, Iran that it cannot have any or to convince non-nuclear countries (such as Brazil and Turkey) to help pressure Iran.

This argument makes sense at a superficial level, but on closer inspection it falls apart. As Iran’s leaders decide whether to push forward with, or put limits on, their nuclear program, they likely consider whether nuclear weapons would improve their security, whether they have the technical capability to produce nuclear weapons, whether they could withstand economic sanctions or military strikes from the United States and its allies, and a host of other factors. The size of the U.S. nuclear arsenal would not affect any of these calculations.

Similarly, in considering whether to pressure Tehran, Turkey likely considers the threat posed by a nuclear Iran, whether it can actually affect Iranian policy, how curtail trade with Iran would hurt its economy, and how its Iran policy will affect relations with other countries. But, again, it is implausible to think that if Washington possessed 1,000 warheads instead of 1,550, Turkey would suddenly get tougher with Iran.

In my research, I systematically searched for a correlation between the size of the U.S. nuclear arsenal and a variety of measurable nonproliferation outcomes: state decisions to explore, pursue, and acquire nuclear weapons; voting on nonproliferation issues in the United Nations Security Council; and the transfer of sensitive nuclear technology to non-nuclear-weapon states. I couldn’t find any evidence of a relationship. The United States has been cutting the size of its nuclear arsenal since the late 1960s, but there is no reason to believe that its cuts have slowed or reversed proliferation. In fact, the most important diplomatic breakthrough in stopping the spread of nukes—the opening for signature of the Nuclear Non-Proliferation Treaty (NPT)—occurred in 1968, at nearly the peak of the U.S. arsenal’s size. And, remember, 177 countries have never pursued nuclear weapons at any
point, including when the United States possessed more than 30,000 warheads.

Some advocates argue that many states signed the NPT only because it mandates cuts to existing nuclear arsenals, but in fact the NPT does not require cuts or disarmament. It simply requires all states to "pursue negotiations in good faith" on measures relating to disarmament. So though the United States can by all means pursue negotiations, it should not come to a deal that further reduces its nuclear stockpile until the world has been made safe for disarmament—and that, unfortunately, will not happen anytime soon.

"The U.S. Can Save Money by Shrinking Its Nuclear Arsenal." DON'T COUNT ON IT.

In the climate of budget austerity now afflicting Washington, some supporters of nuclear cuts turn to another, nonstrategic argument to advance their case, saying that reducing the size of the nuclear arsenal would save money. But it would not save much, and it might even cost more.

It is important to understand that warhead reductions alone will not result in savings. As any employee of the U.S. national nuclear laboratories can tell you, the cost of nuclear weapons is in the infrastructure; the warheads, in comparison, are virtually free. If the United States is going to retain even a handful of nuclear weapons, it will need national laboratories with scientists and technicians, delivery vehicles, military units trained to handle nuclear weapons, and many other capabilities. These are large, fixed costs regardless of the number of warheads in the arsenal.

Moreover, reducing the number of nuclear weapons the United States deploys can actually result in short-term budget increases. Reducing arsenal size means pulling missiles out of silos, dismantling retired warheads, and decommissioning and decontaminating nuclear facilities. All of this costs money.

It would only be by failing to fully modernize the systems that deliver the warheads—intercontinental ballistic missiles, bombers, and submarines—that the United States could hope to save money. But unless it completely disarms or kills a leg of this triad, the country's aging missiles, bombers, and subs will need to be upgraded.

Delaying the modernization of delivery vehicles, as some have suggested, would save only an estimated $3.9 billion annually over 10 years, an amount that is nothing short of trivial compared with the overall U.S. defense budget, which is roughly $600 billion per year.

Over the long term, the budget-savings argument becomes even less compelling. Nuclear weapons provide a lot of bang for the buck, literally and figuratively. President Dwight Eisenhower's "New Look" policy in the 1950s emphasized nuclear weapons—as does current Russian military doctrine—because they are less costly than comparable conventional capabilities. If the United States continues to cut its nuclear arsenal, it will need to develop new conventional capabilities to fill the roles and missions previously performed.
by nuclear weapons. At present, nuclear weapons provide a strategic deterrent at a cost of only about 4 percent of the defense budget. Do we really think equivalent conventional forces would be more cost-efficient?

Furthermore, only if we think the United States can maintain a diminished nuclear force indefinitely is it plausible to think that nuclear cuts will save money, but this would be an unwise bet given that other countries are moving in the opposite direction. In 1989, the Energy Department shut down its only plutonium-pit manufacturing plant at Rocky Flats, Colorado. Decommissioning and decontaminating the facility cost taxpayers $7 billion. In 2007, however, the department restored pit-manufacturing capability at a cost of billions of dollars, and it is seeking billions more for a new facility. This poor decision teaches a broader lesson: It would be much more costly to cut now and build back up later, rather than simply recapitalize current capabilities.

To justify knee-capping the U.S. arsenal as we enter a second nuclear age, the savings would have to be overwhelming. But they are not. As Deputy Defense Secretary Ashton Carter recently said, "Nuclear weapons don’t actually cost that much... You don’t save a lot of money by having arms control."

"If the United States Can’t Go Lower, Who Can?" MAYBE NO ONE.

Fashionistas sometimes quip that Americans are always a couple of years behind the rest of the world in adopting new styles. Trends in nuclear weapons policy are apparently no different from the catwalk. While it is still fashionable in Washington to talk about nuclear reductions, for the rest of the world, nukes are the new black.

Russia needs nuclear weapons to offset the conventional superiority of the United States and NATO and affirm its great-power status. President Vladimir Putin has already poured cold water on Obama’s proposal for additional nuclear reductions, and Russia’s military doctrine emphasizes nuclear weapons, including their first use early in a crisis, to compensate for its weakened conventional military. Russia is subject to the same strategic-warhead limits that apply to the United States under New Start, but it also maintains an arsenal of 3,800 tactical nukes—smaller weapons intended for battlefield use. Moscow is building a rail-mobile missile, has commissioned new nuclear-capable submarines, and plans to construct a next generation of heavy intercontinental ballistic missiles (ICBMs).

China’s nuclear weapons also serve as a deterrent against America’s superior conventional power. During the Cold War, China appeared content with a minimum deterrent—a result, experts speculated, of Mao Zedong’s strategic thinking. But recent scholarship suggests that China’s nuclear arsenal was stunted by organizational and political pathologies. The kinks are now out of the system and Beijing is going bigger. According to the Pentagon, China is expanding its arsenal of warheads, building new nuclear-armed submarines, and developing next-generation, road-mobile ICBMs with multiple independently targeted re-entry vehicle warheads. If U.S.-China relations deteriorate, Beijing might eventually leverage its massive economy to match or surpass America’s nuclear capabilities. Additional U.S. reductions would only make such a sprint to parity all the more tempting.

At this very moment, India and Pakistan are engaged in the most intense nuclear arms race the world has seen since the Cold War. India needs nukes to deter China’s superior conventional and nuclear might to its northeast and to counter Pakistan’s nuclear weapons to the northwest. New Delhi’s nuclear arsenal has grown by more than 200 percent in the past decade and now includes an estimated 100 warheads. It is developing submarine-launched ballistic missiles and building longer-range ballistic missiles, and last year it ordered more than 100 nuclear-capable aircraft from France.

For Pakistan, the pursuit of nuclear superiority over India is seen as a matter of national survival given its recurring conflicts with its much larger neighbor. Pakistan’s nuclear arsenal has also tripled in the past decade and is now estimated to include roughly 110 warheads. Moreover, it is rumored that Pakistani military officers openly talk about an arsenal that will eventually contain more than 1,000 warheads. Islamabad is testing longer-range ballistic missiles, developing new nuclear-capable aircraft, and working on a sea-based nuclear capability.

North Korea has conducted three nuclear tests in the past decade and is estimated to have an expanding arsenal of roughly a dozen warheads. It is also working on a ballistic missile designed to reach the U.S. West Coast. Iran is vigorously pursuing a nuclear capability, and experts assess that Iran could have enough weapons-grade uranium for its first bomb in months. Moreover, the Pentagon estimates that Iran could have a ballistic missile capable of reaching America’s East Coast by 2015. These efforts are making countries in Asia and the Middle East nervous. Officials in Saudi Arabia, South Korea, and Turkey have floated the idea (some more loudly than others) of building their own nukes in response to the new nuclear kids on the block.

World leaders don’t need to read this article to know that large nuclear forces can make things safer. Some scholars might protest that building nuclear arsenals larger than required for retaliation is illogical, but when academic theories are consistently contradicted by evidence from the real world, it is not the real world that is mistaken.

"But So Many Important People Want to Go to Lower—Even to Zero!" GET REAL.

In a 2007 op-ed, Henry Kissinger, William Perry, George Shultz, and Sam
Nunn—a bipartisan group of *éminences grises*—endorsed “setting the goal of a world free of nuclear weapons and working energetically on the actions required to achieve that goal.” Their article reinvigorated the nuclear disarmament movement and helped spark an international “Global Zero” campaign that has drawn the support of former generals, ambassadors, and political officials from the United States and around the world. It is on the wave of this support that Obama announced his intention to reduce nuclear arsenals radically and move toward a world without nuclear weapons.

But it is not clear that a world without nuclear weapons would be desirable, and it certainly isn’t feasible. Only if we could fundamentally transform international politics such that states no longer faced security threats might there be reason to think that the world could be made safe for global zero. And even proponents admit this day may never come. In his famous Prague speech, Obama confessed, “I’m not naive. This goal will not be reached quickly—perhaps not in my lifetime.”

After all, the United States can’t rid the world of nuclear weapons on its own; other states, including its enemies, get a vote. Russia, China, Britain, France, Israel, India, Pakistan, and North Korea possess nuclear weapons not because they blindly imitate the United States, but because they fear their neighbors and, in the case of Washington’s enemies, America’s awesome conventional military power. Even if the United States gave up its entire nuclear arsenal, other countries would not be compelled to follow its lead.

Instead of striving for the smallest possible arsenal in the erroneous belief that less is better, the United States should strive to maintain clear nuclear superiority over its adversaries. Ideally, this means the ability to wipe out an enemy’s nuclear forces before they can be used and to annihilate its homeland—because the more devastating that adversaries find the prospect of nuclear war, the less likely they will be to start trouble. Where this is not possible, the United States must aim for a posture that limits damage to the U.S. homeland to the greatest extent possible and that at least ensures destruction of an adversary.

That means the United States should refrain from additional nuclear reductions and should maintain the “hedge” force of weapons it keeps in reserve. The Obama administration must also follow through on its promise to fully modernize U.S. nuclear infrastructure. Finally, the country must prepare for the possibility that if China or other strategic competitors continue to expand their nuclear arsenals, the United States might once again have to build up its strategic forces. You don’t bring a knife to a gunfight, and America shouldn’t bring a crippled nuclear arsenal to the second nuclear age.

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A veteran of the international development world, John Norris has worked for NGOs, the United Nations, the U.S. State Department, and now the Center for American Progress, traveling everywhere from Africa to the Balkans to South Asia for his work on human rights, international aid, and emergency relief. In his more recent trips abroad, Norris has observed a new problem in developing countries: rising obesity, thanks to aggressive marketing by American junk food companies that export their fatty and sugary snacks overseas—often with backing from U.S. trade and agricultural policies. Now, Norris, who is working with a high-level U.N. panel identifying new international development goals for 2030, says obesity, heart disease, and other noncommunicable health problems will soon force themselves onto the global development agenda, right alongside infectious disease, poverty, and hunger. 160

During her nearly two years in Kabul, Reuters reporter Amie Ferris-Rotman saw life in Afghanistan deteriorate “on almost every level”—security threats, entrenched political corruption, “collective malaise” among coalition forces and diplomats, and especially violence against women. It’s a byproduct, she notes, of the withdrawal of U.S. and international forces from the region. But the massive retrograde logistics operation that she writes about in this issue—basically, packing up a war and going home—also has immediate, and more personal, effects. After seeing how few resources are available to female Afghan journalists trying to cover news in their own country, this fall Ferris-Rotman begins a Knight Journalism Fellowship at Stanford University, where she will develop an outreach, training, and mentoring program that she hopes to launch in the summer of 2014. 135

A fellow at Johns Hopkins University’s School of Advanced International Studies and the New America Foundation, Afshin Molavi has visited and lived in dozens of emerging-market countries as a reporter, political risk analyst, and investor for the World Bank’s International Finance Corporation. If there’s anything connecting these developing nations, it’s what he calls the “global aspirational middle classes,” and according to Molavi, the ultimate symbol of their arrival is a bottle of Johnnie Walker. In recent years Molavi, whose work focuses on the growing commercial and political ties between the Middle East and Asia, has seen the Scotch whiskey just about everywhere, from Cairo to Dubai, Beijing to Istanbul. He even recalls visiting an Arab diplomat’s home in Bangkok, where an unopened bottle of the premium Blue Label sat on a mantel alongside a decorative sculpture. 152

For someone who entered graduate school the month before 9/11, Matthew Kroenig’s thesis topic—nuclear weapons—might seem anachronistic. But sparked by talk of whether al Qaeda could get its hands on a nuke, Kroenig began examining whether such weapons, so often dismissed as Cold War relics, still matter. Now a Georgetown University professor who has done stints at the Pentagon working on Iran and counterrorism, Kroenig recently conducted the first quantitative analysis examining how the size of a country’s nuclear arsenal correlates with its success in international crises. The results surprised even him—and suggest that disarmament could come with some alarming consequences. 142

After a decade based across the Middle East as a foreign correspondent for Newsweek, Navin Peraino decided to look at American foreign policy through a historical lens. The result is his first book, about Abraham Lincoln’s role in international affairs—a topic that, to Peraino’s surprise, remained largely unexplored. Curling from diplomatic dispatches, diaries, newspapers, and other primary sources, Peraino spent four years doing research, from Jerusalem (where he was then based as a journalist) to London to Springfield, Illinois. Now based in Washington, D.C., Peraino says he has caught the bug and plans to continue to write historical books, with a new one already in the works. 120