A Prohibition on Nuclear Weapons: The Best Nonproliferation Policy?

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First, I should state the obvious: how incredibly flattering it is to be given an award named for Hans Bethe, for which the previous recipient was Phillip Morrison. I want to assure everyone that I know I'm not in the same league as these giants. But I am very grateful and pleased to accept it. I'm especially proud to have been associated with FAS, and happy to see that it is on such firm footing.

I was asked to give a short talk. And I thought that, as part of my ongoing campaign to ensure that I will never again be asked to work for the U.S. Department of Defense, I'd like to propose that the prohibition of nuclear weapons should be the centerpiece of our nonproliferation policy—indeed, a key element of our overall foreign and defense policy.

You'll recall that, soon after the end of the Cold War, there was much interest in prohibiting nuclear weapons. The Canberra Commission was perhaps most prominent, and there were also studies and books by Pugwash, the Stimson Center, Jonathan Schell, and others. John Holdren wrote a very nice piece on the subject, and he chaired a National Academy committee that produced consensus report that looked favorably on working toward the prohibition of nuclear weapons.

The basic logic seemed compelling. During the Cold War, the United States faced an implacable adversary. Many people believed that the Soviet Union was ready, willing, and able to use the huge armies under its control to subjugate all of Europe and most of Asia. Nuclear weapons were at the very center of U.S. security policy—first to deter or defeat conventional attacks against U.S. allies in Europe and Asia, and then, as the Soviet Union developed a nuclear arsenal of its own, to deter nuclear attacks.

The huge armies crumbled with the collapse of the Warsaw Pact and the Soviet Union, and with them the need to deter large-scale conventional war. The only remaining role for nuclear weapons, it seemed, was to deter a nuclear attack by Russia, and perhaps China. But if we could somehow eliminate Russian and Chinese nuclear weapons, then there would seem to be for U.S. weapons.

There remained serious questions about the practicality of this goal—in particular, whether we could ever be sure that other countries had eliminated their weapons, how much it would matter if others cheated.

But the fundamental desirability of the goal was hard to deny, at least from a U.S. perspective. This was summed up well by Les Aspin in 1992:

> The United States is the biggest conventional power in the world. There is no longer any need for the United States to have nuclear weapons as an equalizer against other powers. If we were [offered a] magic wand [that would wipe out all nuclear weapons and the knowledge of their construction], we'd wave it in a nanosecond. A world without nuclear weapons would not be disadvantageous to the United States. In fact, a world without nuclear weapons would actually be better. Nuclear weapons are still the big equalizer but now the United States is not the equalizer but the equalizee.

A few months later Aspin became Secretary of Defense and commissioned a bottom-up review of U.S. nuclear policy. But the notion that the transformation in world politics called for fundamental changes in nuclear doctrine never took hold. I know because I participated in the review. There were substantial reductions in the number of weapons, but the basic character of U.S. nuclear posture did not change. The U.S. continued to maintain a large, alert strategic force, targeted for rapid attack against Russian nuclear forces and command and control. This was sometimes attributed to bureaucratic inertia and the persistence of established patterns of thought and behavior, coupled with weak civilian control of the nuclear planning process.

But in the late 1990s a new pattern of thought started to take hold—one that finds that nuclear weapons are now even *more* useful to the United States than they had been during the Cold War—not as central to U.S. security, perhaps, but essential nevertheless, and useful against a broader range of targets, and against many more countries.

This new pattern fully blossomed after the election of George W. Bush. Leaked portions of the 2001 Nuclear Posture Review, as well as other documents and statements, describe a belief that

- U.S. nuclear weapons can deter potential adversaries from acquiring or using chemical, biological, and nuclear weapons and other advanced weaponry;
- That the U.S. should threaten and should plan to use nuclear weapons preemptively to prevent WMD attacks on the United States, its forces abroad, or U.S. allies;
- That the U.S. should use nuclear weapons to destroy certain high-value targets—in particular, hardened and deeply buried targets, or stocks of chemical and biological weapons—that are difficult to destroy with conventional weapons.

It's fair to say that the authors of this doctrine, if offered Les Aspin's magic wand, would chose not to waive it. They believe that nuclear weapons are valuable for much more than deterring nuclear attack.

A thorough critique of the Bush nuclear doctrine would take most of the afternoon. Just a few points:

- Many of the countries mentioned by name in the NPR—North Korea, Iran, Syria, and formerly Iraq and Libya—have been trying to acquire WMD in order to deter the United States from invading or otherwise attacking their vital interests. It's absurd to suggest that U.S. threats will deter these countries from acquiring WMD. Quite the opposite—it will spur them on.
- Threats and plans to use nuclear weapons in response to a chemical or a biological attack are at best unnecessary, and at worst counterproductive. Countries already know that the U.S. has nuclear weapons and that, if they hurt us badly enough, they might provoke a nuclear response. Explicit threats cannot add much to this "existential deterrence". But they can lead the U.S. into a commitment trap, promising retaliation that might be grossly disproportionate. And retaliation would be senseless if we could not determine the true source of the attack. Such threats also violate the negative security assurances the United States has made and restated repeatedly, not to use nuclear weapons against countries that don't have them.

- Plans for preemptive use of nuclear weapons are even more dangerous. Such plans are often framed as necessary to prevent a devastating attack against the United States, by attacking key WMD targets before they can be used. But when you examine the logic of this argument, the utility of nuclear attacks evaporates.

    - First, U.S. intelligence would have to be virtually certain that an enemy was about to attack the United States. But how would we know this, and how could we convince others, after the fact, that preemption was justified? Activities that we might interpret as preparing for an attack might only be intended to signal their resolve—for example, to deter a U.S. invasion. A mistaken preemptive nuclear attack would be a tragedy, and unless it was perfectly effective it could trigger attacks against the United States that might have been avoided altogether.

    - Second, U.S. intelligence would have to correctly identify the enemy weapons, launchers, and command facilities necessary to carry out the attack. Two wars with Iraq have demonstrated the inability of U.S. intelligence to identify strategically important targets. Particularly instructive was the opening salvo of the current war, in which the United States dropped four 1-ton bombs on a site U.S. intelligence believed was a command bunker containing Saddam Hussein. Later inspections revealed that no underground facility existed.

      Adversaries can use various deception techniques, such as relying on mobile facilities or on moving key functions between ordinary surface facilities. If we don't know where the targets are, we can't destroy them.

    - Third, assuming that we could correctly locate and identify them, the strategically vital targets would have to vulnerable to nuclear attack, but not to conventional attacks. The only such class of targets is deep underground facilities. Even here, conventional attacks on tunnel entrances and other surface features can disable the facilities. And even nuclear weapons can't destroy very deep facilities, which merely encourages countries to dig deeper.

- Finally, the collateral damage that would result from a nuclear attack would have to be deemed acceptable and proportionate. But over half of the suspected strategically important targets are located in or near cities; even a single nuclear attack in a major city is likely to kill hundreds of thousands of people. It is difficult for me to imagine a U.S. president being confident enough in U.S. intelligence to order such an attack, and confident that he could subsequently justify it, to his own citizens and to the world, as necessary.

Critics of the Bush nuclear doctrine have emphasized the damage it does to the nonproliferation regime. They cite the apparent violation of our negative security assurances. They claim that moves by the United States to enhance the usefulness of nuclear weapons will increase pressures on other countries to acquire nuclear weapons, and that it will undermine efforts to persuade other countries not to acquire them. After all, if the United States, by far and away the strongest military power, needs nuclear weapons to counter non-nuclear threats, then why does not every other country have even more need for nuclear weapons?

Defenders of the doctrine note that the decisions of the countries we are most worried about—North Korea and Iran—are not much influenced by US restraint. Their efforts to acquire nuclear weapons won't be diminished if the US reduces the number of nuclear weapons it deploys, if we ratify the CTBT, if we forego a nuclear bunker-buster, or even if we pledge not to use nuclear weapons first.

I tend to agree—US nuclear doctrine has little direct effect on the incentive of such countries to "go nuclear."

Instead, I think we should focus on how our nuclear doctrine affects our incentives, and the incentives of likeminded countries, to prevent proliferation and nuclear terrorism. The Bush nuclear doctrine—and the Clinton doctrine before it—are impediments to strengthening the regime—indeed, not just strengthening it, but replacing it with something much more robust.

It’s time to admit that the nonproliferation regime is in serious trouble. North Korea probably already has nuclear weapons, and Iran has taken a major step in this direction. Like a perverse Johnny Appleseed, A.Q. Khan has spread centrifuge enrichment technology around the world; how widely, we don’t know. Those that have it could give it or sell it to others. Several countries could be producing HEU a decade from now. Some of these countries will be unstable and vulnerable to penetration by terrorists or their sympathizers—Pakistan is the poster child for such worries. HEU could be sold or stolen, and it’s quite plausible that a terrorist group could make a gun-type weapon. Although we can deter countries from attacking us with nuclear weapons—assuming we don’t invade their country and they have something to lose—it’s not clear that terrorists can be deterred.

None of this is certain. We might muddle through, as we are trying to do now—containing the North Korean or Iranian nuclear programs through a combination of unappetizing carrots and brittle sticks. Perhaps enrichment technology will spread no further; perhaps no HEU will be sold or stolen. Or perhaps not.

Now consider the types of policy initiatives that would be necessary to substantially reduce the risks of nuclear proliferation and nuclear terrorism. They might include:

- A prohibition on enrichment and reprocessing, except as approved by an international body and placed under international control;
- A prohibition on all production, use, and stocks of HEU or plutonium, except as approved by an international body and placed under international control;
- Global environmental monitoring networks and other verification activities able to detect any undeclared activities to produce significant quantities of nuclear explosive materials;
- Stringent international standards for the protection, control, and accounting of nuclear explosive materials; declarations of all stocks of nuclear materials; audits to ensure that declarations are accurate and complete; inspections and red-team exercises to ensure that agreed standards of physical protection are being met.

I would say there is very little chance of putting any of these policies into effect under the current regime. The Bush administration would prefer to simply impose these policies on states of concern—a “just say no” approach to nonproliferation. But that isn’t going to work, at least not over the long run.

This is where prohibition comes in. A decision by the United States to seriously advocate for the prohibition of nuclear weapons, and to lobby other nuclear weapon states to join it, would dramatically change the terms of debate. It is the one thing I can think of—short of a nuclear detonation in a city—that would get everyone’s attention and would allow such proposals to be seriously considered.

Now, as you know, the United States formally committed itself to the goal of prohibition when it signed the NPT, and we recommitted ourselves to that goal when the Treaty was extended indefinitely in 1995. But the US national security establishment considers this a joke—one of those empty promises that states are obliged to repeat.

I’m talking about something very different from paying lip service to Article VI of the NPT—I’m suggesting that we would propose to replace the NPT and associated nuclear-weapon-free-zone treaties and other agreements with an entirely new treaty prohibiting nuclear weapons. This new treaty could contain an enforcement mechanism, or the permanent members of the Security Council could make it clear that they would authorize the use of force against any country found to be violating the Treaty. This proposal could be coupled with an expansion of the permanent members of the Security Council, which might give it added support. It could also be coupled with a new “atoms for peace” program, which would promise to make proliferation-resistant nuclear power available to all countries, as a measure to mitigate climate change.

This isn’t going to happen overnight, of course. It might take decades to achieve a prohibition on nuclear weapons. But in the short term there would be many advantages in taking this position—enough, perhaps, to achieve some of the related agenda, such as placing sensitive fuel-cycle facilities and stocks of weapon usable materials under international control. Many of these things could be done under the banner of laying the groundwork for prohibition.

To go down this road one would, of course, have to decide that a treaty prohibiting nuclear weapons, if it could be achieved, would truly be in own best interests—taking into account the possibility of cheating. I think it would be.

By voluntarily divesting ourselves of nuclear weapons, we would give ourselves and the other current nuclear powers the strongest possible incentive to see that no other countries were allowed to get the bomb, while at the same time giving us the moral and legal authority to assemble broad coalitions to enforce a global prohibition. It is very likely the only path toward removing nuclear weapons from the regions where they are most likely to be used—South Asia and the Middle East.

To put it bluntly, if we aren't going to have nukes, we're going to make damn sure no one else does. Disarming ourselves is best way to communicate to others that spread of nuclear weapons in intolerable, and the best way to compel ourselves to act like we believe it. Threats to use force in order to thwart proliferation would be quite credible if the nuclear weapon states had voluntarily divested themselves of nuclear weapons.

What about undetected cheating? Here I think the biggest worry in the retention of nuclear weapons by the existing nuclear powers. Having thought long and hard about this, I don't think that any system or monitoring and verification could rule out the possibility that Russia had hidden a few hundred warheads, that China, Israel, India, Pakistan hadn't squirreled a few. In order to sign on to a prohibition, we'd have to be able to live with that risk—just as other countries would have to live with the risk that the United States had sequestered as many as a hundred warheads.

I think that is a risk worth taking, in the sense that it is outweighed by the potential benefits of an agreement and the associated measures to greatly reduce the risks of nuclear proliferation and terrorism. Bear in mind that any of the countries that now have nuclear weapons could build new weapons from scratch in a matter of months. As Jonathan Schell correctly pointed out, this would act as a deterrent to cheating or secret rearmament. The hidden nukes could be used to advantage at most once, for a period of a few months, until others were able to build some of their own. A handful of nuclear weapons could not be used to assert—much less maintain—world dominance. And, if one is worried about this possibility, one could consider retaining a few nuclear weapons under multilateral control as a deterrent.

Would prohibition carry risks? Of course it would. But the continued overt possession of large nuclear arsenals by ten or more countries carries risks, too—risks that they might be used accidentally or without authorization, or as a result of miscalculation or inadvertent escalation, with unimaginably horrible consequences.

Most people in the national security establishment believe that the United States can and should and will retain nuclear weapons for the indefinite future. Indeed, the Bush administration is making plans to rebuild our capacity to design, test, and produce nuclear weapons. If we do this, so will others. Eventually, more will join the club. Can this go on forever without a catastrophe? If the answer is “no,” then we ought to start thinking about the alternative, and I don’t see why we shouldn’t start today.