Bombs Without Borders
Perspectives on the Nuclear Proliferation Threat

Roundtable with
John Lauder
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The Yale Journal of International Affairs recently spoke with three leading nuclear weapons experts about key issues surrounding the threat of nuclear proliferation. John Lauder, a fellow at Arete Associates, served as head of the Central Intelligence Agency Nonproliferation Center until 2004. Jonathan Schell is the Harold Willens Peace Fellow at the Nation Institute and the Peace and Disarmament Correspondent for The Nation magazine. Henry Sokolski is Executive Director of the Nonproliferation Policy Education Center in Washington, DC.

Have nonstate actors replaced states as the predominant threat to U.S. nuclear security?

Jonathan Schell: Not just yet. States are still the main engines of nuclear proliferation and nuclear danger. The art of producing plutonium or bomb-grade uranium is still difficult enough that only states can contemplate it. Proliferation so far—for instance by Pakistan’s bomb-maker A.Q. Kahn—has, as far as we know, only been at the state level. Moreover, proliferation is creating new flashpoints of nuclear danger in East Asia and in the Middle East. Let us also note that a state very familiar to us, our own, has been the only one to actually threaten the use of nuclear arms recently. I am speaking of the response of President George Bush who, when asked if he was contemplating using nuclear arms against Iran, answered that all options are still on the table. That’s about as explicit as presidents get in making nuclear threats. Such statements are prime goads to others to proliferate.
Neither should we forget that China and Russia are nuclear powers. Strangely, the very fact that Russia was our Cold War adversary has rendered its nuclear arms almost invisible to us now. At present, the U.S. and Russia have no serious bone of contention, but politics is notoriously changeable. A state of nuclear confrontation could arise again.

I do not mean to minimize the danger of terrorist acquisition of nuclear weapons. It is readily conceivable. If it happens, the United States is perfectly defenseless against it. But even in this matter, our attention must be on states, the sole source of such bomb-grade materials. The sole line of defense is immediately around existing arsenals in Pakistan, in Russia, even in the United States. Curiously, however, the present administration gives a very low priority to this effort—for example, by under-funding the Nunn-Lugar program to help Russia secure its nuclear materials and by failing to hold Pakistan accountable for Kahn’s activities.

**John Lauder:** Nonstate actors (terrorists, criminals, or entrepreneurs like A.Q. Khan) have not replaced state actors as a primary concern to the United States, but rather have created a growing threat of nuclear proliferation or use from another direction. U.S. nuclear policy must remain attentive to state actors for several reasons. The nuclear weapons of Russia and China are sufficient in numbers and sophistication to pose an existential threat to the United States if the strategic relationship with such powers is not managed effectively. Nuclear weapons in the hands of regional powers, such as India and Pakistan, raise the possibility that regional conflict could escalate into a nuclear exchange. Emerging nuclear states, such as North Korea or Iran, raise their own challenges to international stability and to the interests of the United States and our allies. A number of other states, many friendly to the United States and below the usual radar of policy and intelligence concerns, have sufficient latent nuclear expertise to break out quickly in ways that can surprise and confound us. Finally, the fastest paths for a nonstate actor to acquire nuclear weapons would be to obtain one directly or through theft from a state actor or to gather fissile material from a state actor’s inventory. Hence, a focus on state actors with nuclear weapons programs or significant latent capability as well as efforts to maintain the safety and security of fissile material in all state actors are key steps in managing the challenges posed by independent and terrorist organizations with harmful intentions.
Nonstate actors, either sponsored by states or acting on their own, pose unique challenges for U.S. policy and intelligence that are beyond the scope of much of the traditional nonproliferation and counterproliferation tools that are directed more to states. For example, the spread of nuclear technology via entrepreneurs and even the internet raises the possibility of boutique ways to develop at least a radiological weapons capability that are not easily frustrated by current national and international controls and fora. In addition, the challenge of attribution and deterrence against use of nuclear capability by nonstate actors is much more complicated than the Cold War model.

What are the challenges posed to the U.S. intelligence community by WMD proliferation, and to what extent are our agencies prepared to deal with those challenges?

Henry Sokolski: Policymakers rarely take on problems that are likely to increase political friction with other countries. When it comes to the spread of strategic weapons-related technologies, they would rather wait until the problem is obvious—and, as a result, much more difficult to manage—than to bruise relations when the problem is still immature. And they have a time-tested way to buy time: until a proliferation case is undeniably clear, the policymaker can blame the intelligence community for not supplying him with actionable, timely intelligence. The intelligence community, meanwhile, is more than willing to take this hit so long as it is accompanied—as it almost always is—with increased funding to strengthen intelligence gathering and analysis.

There is only one problem: none of this is likely to improve matters. Why? Proliferation does not lend itself to precise analysis. What the intelligence community can do, and historically has done quite effectively, is give strategic warning—ten or more years—of other states’ efforts to acquire strategic weapons. What it consistently has been bad at is securing accurate tactical information about the exact status of any given strategic weapons program. In the few instances that policymakers acted on the first indications of a strategic weapons effort, nonproliferation successes generally followed. As the policymaking community falls further behind in curbing proliferation, though, it has been far more prone to demand accurate, late-breaking tactical insights that are difficult or impossible to secure and ultimately of little value in blocking a given program.

The challenge the intelligence community faces, then, is resisting the temptation of being rewarded repeatedly for their failure to do well at tactical intelligence problems. Instead, it should make clear that unless the policymaking community is willing to act early on its strategic warnings, all bets
should be off in effectively blocking the strategic weapons program at hand. Given the inclinations of the policymaking and intelligence communities, this challenge will be exceedingly difficult to meet.

**John Lauder:** Intelligence is a necessary enabler for all other steps to reduce WMD vulnerability, but intelligence cannot be relied upon to solve all WMD problems. Hard intelligence information on WMD programs is generally sparse and assessments rely on judgments of intentions, which is the most difficult task that intelligence faces. Intelligence tasks related to WMD go beyond the challenges of monitoring missiles in silos and tanks in armored divisions. Intelligence efforts are complicated by the fact that many WMD programs are based on technologies and materials that have civil as well as military applications.

The sheer scope of the proliferation problem is another dilemma for intelligence. Some fifteen countries have significant WMD programs and at least as many countries have the technical capability to start or resume programs with little warning. WMD-related technology has propagated in the past decade, and a number of nonstate organizations, including terrorist groups, have shown interest in WMD capability.

Despite the scope of the problem and the great potential for surprise, there have been a number of significant intelligence successes. Many of the successes, however, are resource intensive and not easily scaled across the breadth of the challenges faced by the United States. The challenge for the intelligence community is to continue to learn from both successes and failures, to do a better job of integration across organizations and disciplines, to make innovative use of the rich range of available collection and analytical tools, and to improve the rigor and tradecraft of collection and analysis. In the long term, important keys for success will be maintaining a sense of urgency and a focus on anticipating and combating the next steps in potentially hostile WMD programs.

■ How has the global nuclear landscape been changed by Iran’s aggressive commitment to obtain nuclear capabilities?

**Henry Sokolski:** By getting the United States and others to concede that Tehran has a right under the Nuclear Non-Proliferation Treaty (NPT) to make nuclear fuel, a process that can bring it within days of acquiring a nuclear weapon, Iran has all but turned the NPT into a legal defense for other would-be bomb-makers. Unfortunately, Iran’s nuclear assertions build on a lamentable past: over the last thirty years, the United States and other key nuclear-supplier states have winked at the “peaceful” nuclear fuel-making activities of South Africa, Brazil, the Netherlands, Argentina,
Germany, and Japan. The United States and its key allies have denied that this is even regrettable. Instead of emphasizing that the NPT does not recognize any per se right to any specific nuclear technology but only to activities that are “peaceful,” they have all but joined the Iranian Foreign Ministry in arguing that if a nuclear activity has some conceivable civilian purpose and is open to occasional international inspections, it is protected under the NPT.

What, then, is Washington’s complaint against Tehran? A very narrow one: Iran failed to declare these activities to the International Atomic Energy Agency (IAEA) in a timely manner. The United States also contends that Iran is intent on building a bomb, but a large number of countries have yet to be convinced on this point. The result is that other countries, including those in the Arab League and the Non-Aligned Movement, insist that Iran’s past transgressions are too minor to be sanctioned and that all NPT members are free to make nuclear fuel if they choose.

This world is unlikely to be very peaceful. IAEA inspectors can neither be counted upon to find illicit, covert nuclear facilities nor can they detect nuclear fuel diversions early enough to prevent the material from being made into bombs. What, then, is the result of Iran’s persevering with its now accepted reading of the NPT? There will be far more proliferation legally protected by its mistaken NPT interpretation, more nuclear weapons material produced in more places, greater uncertainty as to where this material might be, a higher danger of nuclear theft, and a far greater chance of international miscalculation and war. In short, the next generation will again be a nuclear one.

**Jonathan Schell:** I would not say that Iran’s commitment is aggressive. Iran is doing what several other countries, such as India and Israel, have done in the past, which is first to build up its nuclear-power capacity. As the steps to acquiring the nuclear-power fuel cycle, which is explicitly permitted under the rules of the NPT, constitute most of the key steps to the bomb, there is no need at this time for Iran to aggressively pursue nuclear arms. What it did not have the right to do under the NPT was conceal some of its key facilities from IAEA, something it definitely did. Iran may or may not already have decided to obtain the bomb, but at any point in the five to ten years that, according to the CIA, it will take them to get the bomb, they can reconsider their decision. Even if we could divine their intentions regarding the bomb—and we

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cannot—the key issue now would not be intention but capability. Accordingly, there need be no rush to war, even if we supposed—as I do not—that war would solve the problem. Moreover, the value of Iran’s case as a precedent is not great. India, Pakistan, and North Korea crossed the nuclear finish line in the face of opposition from the United States and others. Still, the rise of a nuclear-armed Iran would be a grave development, perhaps on a level with North Korea’s rise as a nuclear power—although, for political reasons, no one much mentions the North Korean failure any more.

**How can the United States encourage the peaceful proliferation of nuclear energy without also promoting the more dangerous nuclear ambitions of our enemies?**

**John Lauder:** A number of factors are driving increased interest in nuclear power as a method of meeting the economic and environmental challenges of increased international demand for energy. The importance and methods of balancing the expansion of nuclear energy with the risks of contributing to the proliferation of nuclear weapons are well known. Whatever particular path is chosen to strike this balance, it will underscore the importance of both the U.S. national security community and the international community to safeguard and secure fissile material worldwide. There are a number of U.S. and international programs, such as the Nunn-Lugar Cooperative Threat Reduction Initiative, that have this goal. A key to the success of such programs is an understanding of the locations and quantity of nuclear materials worldwide. Such a task is not as daunting as a similar inventory might be for potentially threatening chemical or biological materials, which are more diverse and ubiquitous than the more finite quantities of plutonium, highly enriched uranium, and other nuclear materials of particular concern. Though several intelligence and diplomatic measures have been proposed, the U.S. national security community has not approached the task of ascertaining the location, security, and quantities of nuclear materials with the same rigor or interagency and international cooperation that we applied to the arms control problems of the Cold War. An expansion of nuclear power generation makes the pursuit of such measures even more important.

**Henry Sokolski:** We may well have already made our mistake by interpreting the NPT as if it clearly gave nations a per se right to any nuclear technology. If so, not only would enforcing the current nuclear rules not be enough, it would surely make things worse by rendering the spread of the most dangerous nuclear fuel-making activities unassailably legitimate. The latest fad of trying to internationalize these activities is also unlikely to help much. After
all, many nations will want to conduct dangerous nuclear activities and will be willing to see them subsidized in the name of “energy security.”

What can we do to prevent the worst—a world full of nuclear-weapons-ready states hiding behind the legalism of “peaceful nuclear energy”? One idea that has never been tried would put civilian nuclear-energy development on a strict diet of private financing and open-market competition. In such a world, nuclear energy’s backers would have to assume and internalize the full costs of the security and safety risks now being covered by governments and international organizations. Currently no private bank would invest in any nuclear program unless it was largely insured and financially guaranteed or subsidized by some government. Under the proposed regime, all of these nuclear-specific government guarantees and subsidies would have to be dropped. The first nuclear sector most likely to feel the sting of this approach would be nuclear fuel-making. As one recent IAEA study made clear, with easily one to two decades of surplus enrichment capacity already extant and no economic justification for reprocessing, the economic justification for expanding existing net fuel-making capacity is slim.

Beyond this approach, making the operators of reactors assume the full costs of insuring, decommissioning, safeguarding, and physically securing their plants against accidents, nuclear theft, military and terrorist attacks, along with waste storage and disposal would go a long way toward keeping nuclear energy’s expansion relatively contained. Finally, it also would be helpful if there were an international norm favoring the opening of any effort to supply energy, medical isotopes, or nuclear research to competitive international bidding with contracts awarded only to the most economical, unsubsidized bidder. The World Trade Organization already promotes such a model in the nonenergy sectors. The Convention on Sustainable Energy of 1994 also has been interpreted to require open international bidding on large energy-related projects. Creating such a norm and institutionalizing it would not only forestall the otherwise likely spread of unnecessary, dangerous nuclear programs, but also would encourage the most appropriate nuclear and nonnuclear energy and research technologies to emerge.

■ How successful has the Bush administration been in realizing a viable long-term strategy for decreasing the threat to American national security posed by nuclear weapons?
Jonathan Schell: The Bush administration’s nonproliferation policies have been a spectacular failure. It waged a war to stop a nuclear program that did not exist in Iraq. It let North Korea cross the finish line almost without comment—indeed, at first, covering up North Korea’s program in October of 2001 in order to obtain the Congressional vote for the useless war in Iraq. It failed to take the elementary step of strengthening the Nunn-Lugar program to secure Russia’s poorly guarded nuclear materials, which could be the greatest proliferation danger of them all. Then it became an enabler of India’s nuclear program in the recent deal, which, while putting some reactors under IAEA safeguards, explicitly permits others to be used for bomb material, thus delivering a body blow to the NPT, the Nuclear Suppliers Group regulations, and U.S. laws. As a result of all these failures, and the misbegotten policy that generated them, the world today simply lacks any workable nonproliferation program.

John Lauder: Nuclear nonproliferation has been high on the list of strategic priorities for administrations of both parties. One important development in U.S. policy over the last few years has been the increased focus on preventing and rolling back nuclear weapons programs and keeping nuclear and other WMD out of the hands of rogue states and terrorists. The most striking success in this regard was the decision by Libya, with the encouragement of effective international diplomacy, intelligence operations, and interdictions, to give up its WMD programs. Other important steps have included the exposure of the threat posed by proliferation networks, such as those orchestrated by A.Q. Khan, and the creation of the Proliferation Security Initiative as an international interdiction mechanism. The strategic framework, as articulated in national security directives and in speeches, such as President Bush’s February 2004 National Defense University address, brings together international norms, threat reduction and preventive measures, as well as diplomacy, economic leverage, law enforcement, and intelligence activities to combat WMD programs.

The challenge for this and previous administrations has been to find the operational art and urgency to implement the strategy effectively. It has been difficult historically for the United States to remain strategically focused on nonproliferation and anticipate and counter the next steps in WMD programs across the board while playing “whack-a-mole” against the crisis of the moment. Intelligence, defense, diplomatic, and homeland security organizations are still grappling with how to implement the strategy across traditional bureaucratic lines. There has been much progress but there remains considerable work to be done.