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Reflections on the Atomic Age

How should we deal with the dangers posed by nuclear arsenals and the proliferation of nuclear materials? Today, Joseph Siracusa looks back at the 'atomic age' and assesses the merits of three approaches that were popular then — deterrence, the Global Zero movement, and sanctions regimes.

By Joseph Siracusa for ISN

Famed diplomat George F. Kennan had never heard of the Albert Einstein Peace Prize when he received a phone call on March 9, 1981, informing him that he had become the second recipient of the award. The ceremony took place in May before members of the new Reagan administration, as well as veteran Soviet ambassador to the U.S., Anatoly Dobrynin. Long concerned with the nuclear question – how much is enough? – Kennan likened American and Soviet leaders to "men in a dream, like lemmings headed for the sea, like the children of Hamlin marching blindly behind their Pied Piper." Beginning with the assumption that American and Soviet arsenals were "fantastically redundant to the purpose in question"—deterrence—he urged "an immediate across-the-board reduction by 50 percent of the nuclear arsenals then being maintained by the two superpowers; a reduction affecting in equal measure all forms of the weapon, strategic, medium-range, and tactical, as well as their means of delivery." While Kennan's advice was promptly ignored, the problem was, of course, not new. President Dwight D. Eisenhower, perpetually confronted with his own doubts and worries about underwriting America's technical superiority in the Atomic Age, was among the first to articulate the problem, informing his advisers that "We are piling up these armaments because we don't know what else to do to provide for our security." By the time Eisenhower left office, there were already more weapons than conceivable targets.

A sample of statistics from the global nuclear age provides a sobering reminder of the scale of the problem. Upwards of 128,000 nuclear weapons have been produced in the past 68 years, of which about 98 percent were produced by the United States and the former Soviet Union. The nine current members of the nuclear club still possess 17,265 operational nuclear weapons between them, thousands of which presumably are ready to fire at a moment's notice, enough to destroy the Earth's inhabitant many, many times over. What should be done about this? On the whole, there are three basic options: 1) the deterrence approach, 2) the 'global zero' option and 3) various kind of sanctions. The question is: will any of them work?

Eisenhower's warning

In his farewell address, delivered on January 17, 1961, President Eisenhower noted that the conjunction of an immense military establishment and a large arms industry, each in itself necessary,

was new in the American experience. Recognizing the imperative to American security of possession of the latest scientific and military technology, he warned his fellow citizens that they must not fail to comprehend its implications. In the circumstances, the president concluded, “Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.” As a citizen-soldier, and because of his long experience in both the Army and the presidency, Eisenhower knew firsthand the invidious connection between industrialists and bureaucrats in their domination of the American defense establishment. He himself had presided over the growth of America’s nuclear arsenal from 1,000 warheads in 1953 to more than 18,000 when he left. His message was clear; his remedy less so.

Eisenhower’s warning about the dangers of the military-industrial complex has surely come to pass. The waste produced by the U. S. defense establishment—not to mention the Soviet/Russian defense establishment, and the others – has amounted to a policy of national profligacy. Taking just one example, from 1940 to 1996, according to the Brookings Institution’s *Atomic Audit,* the United States spent almost $5.5 trillion (in constant 1996 dollars) on nuclear weapons and weapons-related programs. This was 29 percent of all military spending from 1940 (beginning with the Manhattan Project) through 1996 ($18.7 trillion). Put another way, this figure exceeded all other categories of government spending except non-nuclear national defense ($13.2 trillion) and social security ($7.9 trillion) amounting to almost 11 percent of all government expenditures through 1996. During this period, U. S. administrations spent on average nearly $98 billion a year developing and maintaining the nation’s nuclear capabilities. Yet, there was another dimension to these costs. Most of this spending was done in secret, but much more significant was each administration’s reliance on untraceable and unreported budgets. Equally important, “[T]he nuclear secrecy system,” according to the authors of *Atomic Audit*, “has had adverse implications for informed congressional and public debate over nuclear policy, constitutional guarantees, government accountability, and civilian control over the military.” The result of this unprecedented secrecy, Janet Farrell Brodie argues, contributed mightily to the emerging security state as “U.S. civilian society became increasingly militarized during the Cold War.” Eisenhower did well to worry.

For its part, the Soviet Union’s nuclear (and foreign) policies were largely driven by its own military-industrial complex. Dmitry Ustinov, the brilliant technocrat who oversaw the moving and rebuilding of Soviet industries during World War II, was “a tireless leader of the Soviet military-industrial complex.” He and minister of defense, Andrei Grechko, were persuaded beyond peradventure that Moscow faced another world war and were determined that the U.S.S.R. would emerge victorious. Leonid Brezhnev also believed in negotiating from a position of strength. Professor Vladislav Zubok writes that these two men pursued an “unrelenting arms race,” and under Brezhnev’s leadership, by the mid-1970s, total defense-related expenses, especially for missiles, grew at an alarming rate with a detrimental impact on the Soviet standard of living. Indeed, Mikhail Gorbachev complained that he was unaware of “the true scale of the militarization of the country” until after he became general secretary. Told at first that military expenditures comprised 16 percent of the nation’s budget, he soon learned that the real figure was closer to 40 percent and that of the 25 billion rubles marked for science, the military took 20 billion for technical research and development. The state’s emphasis on centralization, secrecy, and the military-industrial complex had all but destabilized the Soviet economy.

Nuclear alarmism

With worries about nuclear proliferation mounting during the early years of the twenty-first century, is there a danger of nuclear alarmism in the United States and elsewhere? In their 2008 article in *International Security*, security specialists William Potter and Gaukhar Mukhatzhanova declared,

“Today it is hard to find an analyst or commentator on nuclear proliferation who is not pessimistic about the future.” What apparently upsets these experts is that they find little by way of existing proposals that offer a means of containing nuclear proliferation. One observer argued that the past offered few or no guidelines for the future: “During the Cold War, the world’s security was built on a handful of interlocking truths that were dreadful to contemplate, but blessedly stable … every brick of that deterrent edifice is now crumbling.”

Historian Francis Gavin has challenged this overly pessimistic outlook, arguing that this nuclear alarmism has resulted in overstated claims that are “in some cases, wrong, emerging from a poor understanding of the history of nuclear proliferation and nonproliferation.” He examines a number of myths that drive the opinion that new nuclear threats presumably are “more dangerous than those of the past.” For example, he reviews those beliefs that during the Cold War nuclear weapons readily stabilized international politics or the converse that superpower rivalry alone drove proliferation during the same years. The alarmists have oversimplified the strategic dilemmas of the Cold War era and have ignored the regional security issues that contributed to proliferation during these years. Those analysts who believe that Washington and Moscow alone created the nonproliferation regime, one might add, ignore the very considerable role played by the international community. No one, however, dismisses the fact that nuclear proliferation is an important policy matter. Certainly, Gavin sees it as such, but warns that “overreacting to current dangers while mischaracterizing those of the past” could “drive misguided policies.”

Surely, then, there are significant lessons to be harvested from the history of the nuclear weapons era. Because twenty-first century proliferation issues, as Gavin points out, “have deep roots in the past” for global “policies to be successful, an understanding of this history is vital.”

What, then, should be done, and what should leaders and officials consider when determining their policies and politics? There are two basic ideas that will dominate discussions in the years ahead: a) expanded nuclear deterrence and b) applying economic/military sanctions. From these two ideas, three general approaches may be discerned. First, an inheritance from the First Nuclear Age is the deterrent (and “taboo”) approach that militates against any state’s first use of nuclear weapons. Then, there are proponents of the “global zero” approach, of which President Barack Obama (a nuclear optimist) is the chief exponent, who are persuaded that enforcement is best handled by the nuclear weapons states setting an example. Yet, as Americans reduce their nuclear stockpiles, European nations, Japan, and South Korea, for whom the U. S. provides a nuclear umbrella, worry about whether the U. S. is also reducing its commitment to their protection. The third approach, applying economic, military, and other (cyber/assassination) sanctions, has its supporters, with economic sanctions currently being employed in the cases of North Korea and (for the moment) Iran. The idea of military sanctions has also been advanced, such as Israel employed in the 1981 Osirak bombing of an Iraqi nuclear facility. Sanctions, in turn, raise several important questions: regarding state sovereignty, whether nuclear weapons states have the legal right to interfere with states electing a nuclear weapons program, and whether sanctions are really effective. Indeed, the real question is: Will any of these options actually work?

What do we know? That we have succeeded in developing weapons with the capability of global self-destruction. Needless to say, the human race is in this together – and together must find a resolution until such time as ‘the bomb’ has become an anachronism.

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